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ABSTRACT

This 1976 study presents an update of a 1971 assessment of Illinois Area Vocational Centers (AVCs). The following topics are discussed in sections of this report: (1) methodology of the study which included meetings with an advisory committee of AVC directors, interviews at each of twenty-nine operating AVCs, distribution of 2,000 of eleven different types, gathering of data from state sources and interviews, and interviews of AVC authorities in five other states; (2) history, analysis, and future expectations of state administrative policy regarding AVCs; (3) description of factors which have led to the diverse educational capabilities and financial situations of AVCs; (4) conclusions drawn from data gathered for the study including those relating to state and local funding policies, state laws and guidelines, AVC administration and organization, other providers of vocational education, meeting manpower needs, other secondary vocational institutions, and general policies; and (5) recommendations directed to state and local authorities based on the conclusions. Numerous figures and tables of statistical data are interspersed throughout the report. (BL)

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AN ASSESSMENT OF ILLINOIS AREA VOCATIONAL CENTERS

1976

JAMES A. G. HAMILTON
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June 1976

performed by:

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George J. Nolfi
President

June 30, 1976

William E. Nagel
Executive Director
Advisory Council on Vocational Education
575 Lincoln Tower Plaza
524 South Second St.
Springfield, Illinois 62706

Dear Dr. Nagel:

We are pleased to submit this report assessing Area Vocational Centers in Illinois near the end of the system's first decade. We believe that the achievements of the system warrant a positive response to its problems by State and local authorities. We expect that the recommendations made in this report will serve the Advisory Council in its role of encouraging such a response and of enhancing vocational education opportunities in general. It has been a privilege to encounter and contribute to the high ideals and standards of your State.

This study was performed pursuant to an agreement with the Advisory Council on Vocational Education of the State of Illinois. The effort by University Consultants, Inc., complies with all Federal and State regulations and/or legal requirements applicable to contract agreements including Table VI of the Civil Rights Act of 1964 and the Illinois Fair Employment Act, Article III, Section 3.1.

The opinions expressed in this report are those of University Consultants, Inc., and not of the Advisory Council. The following persons are responsible for the report:

Principal Investigator	Mr. James A. G. Hamilton
Project Director	Dr. George J. Nolfi
Interviewers	Mr. Harry Crane
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We wish to thank the Directors and staffs of the twenty-nine operating Area Vocational Centers; the staffs of the Adult, Vocational, and Technical Education section of the Illinois Office of Education, the Governor's Office of Manpower and Human Development, the Illinois Community College Board, and the Illinois State Library; Messrs. Harvey Bos, Jim Cadagin, and Dan Swanson, who served on the AVC Directors' advisory committee to the project; and the staff of the Advisory Council, for their generous cooperation and assistance in the research efforts of tnis study.

Sincerely yours,

George J. Nolfi

George J. Nolfi, Ph. D.
Project Director

GJN/bv

TABLE OF CONTENTS

Letter of Transmittal *i*

List of Tables and Figures *iii*

I. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS *1*

A. General Policy Conclusions and Recommendations *1*

B. Conclusions and Recommendations Relating to State and Local Funding Policies *7*

C. Conclusions and Recommendations Relating to State Laws and Guidelines *11*

D. Conclusions and Recommendations Relating to AVC Administration and Organization *15*

E. Conclusions and Recommendations Relating to Articulation of Programs with Other Providers of Vocational Education *23*

F. Conclusions and Recommendations Relating to Meeting Manpower Needs *27*

G. Conclusions and Recommendations Relating to Other Secondary Vocational Institutions *31*

II. INTRODUCTION AND METHODOLOGY *33*

A. Introduction *33*

B. Methodology *33*

III. AREA VOCATIONAL CENTERS AND GOVERNMENT POLICY: CONCLUSIONS RELATING TO LAWS AND GUIDELINES *39*

IV. THE ILLINOIS AREA VOCATIONAL CENTER SYSTEM IN 1976: GOALS AND ACHIEVEMENTS *49*

A. Goals of the Number of Students Served *49*

B. Goals of Facilities and Equipment *58*

C. Goals for Administration, Guidance, and Placement Services *65*

D. Goals for Program Offerings *75*

E. Goals for Articulation of Programs *77*

F. Goals for Meeting the State's Manpower Needs *82*

G. Goals for Planning Regional Vocational Education *84*

APPENDIX A. REPORTS ON INDIVIDUAL AVC'S *99*

APPENDIX B. LIST OF SCHOOLS PARTICIPATING IN AVC AGREEMENTS *159*

APPENDIX C. TABULATED FREQUENCIES OF RESPONSES TO QUESTIONNAIRES *165*

APPENDIX D. REPRODUCTIONS OF QUESTIONNAIRES AND SAMPLE LISTS *203*

BIBLIOGRAPHY *227*

LIST OF TABLES AND FIGURES

TABLES

1. Summary Table. History of Illinois Area Vocational Centers *2*
2. Questionnaire Distribution and Response *36*
3. Six States with Area Secondary Vocational Centers *47*
4. Establishment Date versus Regional Nature *51*
5. Type of Economic Area and Date Operational *52*
6. Accessibility Perceptions by Distance Traveled to AVC *55*
7. Participating High Schools' Indications of Needs for AVC Openings *57*
8. Friends' Achievements and Accessibility Perceptions *86*
9. Seniors' Plans for Next Year by Distance Traveled to AVC *87*
10. Working Graduates' Job Characteristics *91*
11. Graduates in School - Program Characteristics *92*
12. Rural, Suburban, and Urban Participating High Schools' Responses to AVC Organization Questions *94*
13. Participating High School Characteristics *95*

FIGURES

1. Area Vocational Centers *3*
2. Analytic Regions in Illinois *5*
3. Area Secondary Vocational Center Planning Guide - Table of Contents *43*
4. Sample Credit and Proficiency Agreement *81*

CHAPTER I

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

It is the conclusion of this report that Area Vocational Centers are strong elements in Illinois' commitment to excellence in education. Nevertheless, important changes in the program and funding policies of State and local authorities are recommended. These changes will encourage efficient alternative ways of bringing advanced vocational education to presently unserved secondary students. The changes will also insure the financial survival of successful AVC's and other area vocational programs. Recommendations are presented in this chapter, following a summary of the conclusions which led to them. Page numbers in parentheses refer to the sections of the report where the facts behind the conclusions can be found.

A. GENERAL POLICY CONCLUSIONS AND RECOMMENDATIONS

1. CONCLUSION: Area Vocational Centers (AVC's) have provided, and can continue to provide, unique and significant opportunities for vocational training to high school students and others. Originally more dependent on State aid than any other major component of the vocational education system, AVC's have increased in number and size in spite of reduced or constant State reimbursements in the face of rising costs (see Table 1 and Figure 1). A majority of the school districts in the State are participating in a planned or operating AVC. Many aspects of the system have been thoroughly tested and found successful:

-- increased opportunities for rural high school students

-- encouragement of local investment in vocational education

TABLE 1.

SUMMARY TABLE. HISTORY OF ILLINOIS AREA VOCATIONAL CENTERS

Year	1 Number of operating centers	2 Enrollment in AVC's	3 11th and 12th grade enrollment of participating schools	4 Average percent of students served[1]	5 Construction plus initial equipment[2]	6 Supplemental yearly equipment[2]	7 Operational reimbursement[2]	8 Average per capita total costs (2 credits)	9 Average per capita total reimbursement (2 credits)[2]
1966					71,802	16,314			
1967	5	837	*	*	24,501	23,802	159,090	432	190
1968	11	2,228	*	*	301,885	73,021	414,880	453	180
1969	14	3,802	*	*	1,046,727	197,376	740,370	453	191
1970	17	5,799	47,311	12	1,571,231	382,172	1,418,524	525	236
1971	17	7,490	*	*	2,034,577	171,222	1,302,479	490	173
1972	21	11,484	*	*	2,323,208	92,519	1,477,691	479	129
1973	23	12,583	*	*	767,930	158,904	1,967,272	519	156
1974	24	14,395	79,806	18	377,123	118,910	2,372,301	543	158
1975	26	16,177	93,576	17	1,367,304	114,701	2,096,828	621	129
1976	29	*	*	*	*	*	*	*	*
Total at end of 1st 5 years	17	5,799	47,311	12	3,016,146	692,685	2,732,864	525	236
Total at end of 2nd 5 years	26	16,177	93,576	17	6,870,142	656,256	9,216,571	621	129
Total for 10 years	26	16,177	93,576	17	9,886,288	1,348,941	11,949,435	621	129

[1] Column 2 ÷ Column 3

[2] State and federal funds only

*Data not available

Sources:

Columns 1,2,5,6,7,8,9 - Illinois Area Centers Fiscal-Statistical Data, AVTE (1976)

Column 3 - An Analysis of Area Vocational Centers in Illinois, Edward T. Anderson for AVTE (1971)

AREA VOCATIONAL CENTERS
(Multi District Secondary)

FIGURE 1

Stephenson Co. AVC
Freeport

Jo Daviess-Carroll Co. AVC
Elizabeth

Whiteside AVC
Sterling

Indian Valley AVC
Sandwich

United Twp. AVC
East Moline

LaSalle-Peru AVC
LaSalle

Livingston AVC
Pontiac

Galesburg AVC
Galesburg

West Central Ill. AVC
Macomb

Pekin AVC
Pekin

Quincy AVC
Quincy

Capital AVC
Springfield

J.B. Johnson CC
Alton

Collinsville AVC
Collinsville

Beck AVC
Red Bud

Rockford AVC
Rockford

McHenry Co. AVC
Woodstock

Lake County AVC
Grayslake

Mid Valley AVC
Maple Park

DAVEA
Addison

Sauk ACC
Crestwood

WILCO AVC
Romeoville

Grundy AVC
Morris

Kankakee AVC
Bourbonnais

Iroquois ACC
Watseka

Bloomington AVC
Bloomington

VOTEC
Danville

Lincolnland AVC
Lincoln

Decatur AVC
Decatur

Okaw AVC
Vandalia

Ambraw Valley AVC
Lawrenceville

Mt. Vernon AVC
Mt. Vernon

Little Wabash AVC
Carmi

Marion AVC
Marion

Operational

Phase III Approved
Construction Facilities

Phase II Approved
Developing Facility Plans

Phase I Approved
Developing Educational Specifications

September 15, 1975

Source: AVTE

-- a regional outlook on manpower needs

-- an improved self-concept of vocational students. (49-99)

RECOMMENDATION: AVC's should continue to receive special support from the State. Additional funds should be allocated in some areas. The positive features of AVC's should be adopted by alternative systems.

2. CONCLUSION: Current State plans for meeting occupational education goals for eleventh and twelfth graders or manpower needs goals for the State could be improved. The overlapping goals of high schools, AVC's, community colleges, CETA programs, and employer training programs create a significant potential for facilities and program duplication. At the same time, some attainable training goals are not met because of insufficient regional coordination. Finally, local agencies are receiving insufficient guidance from the State regarding the efficient allocation of scarce training resources. (49-99)

RECOMMENDATION: A comprehensive master plan for programs and facilities for secondary occupational education and articulation should be prepared by the Board of Education and its staff, the Illinois Community College Board and its staff, and the Board of Higher Education and its staff. Planning regions based on economic factors should be established (CETA analytic regions might be used; see Figure 2), and goals for each region should be set. The goals should state:

-- numbers of students to be served

-- facilities and equipment to be provided

-- programs to be offered

-- guidance and placement services to be provided.

Within the regions, flexibility should be encouraged. Various agencies should

FIGURE 2

ANALYTIC REGIONS IN ILLINOIS

Source: Manpower Report to the Governor, State of Illinois, Governor's Advisory Council on Manpower, August 1975.

be eligible to provide the services, with preference given to existing agencies which meet uniform regional standards. The alternatives to be considered by each region should include:

-- joint agreements among high schools, AVC's, and community colleges

-- purchases of services from AVC's or community colleges outside of a full joint agreement

-- contracts with proprietary schools or employer training programs.

3. CONCLUSION: Present State and local funding policies for facilities and operations do not equitably meet the needs of all Illinois regions for advanced secondary vocational education. In addition to the positive results mentioned in Conclusion 1, these policies have had the following results:

-- facilities are under-utilized

-- State matching funds are being used to build AVC's and other area vocational facilities in areas where local funds have not been fully tapped

-- reimbursements for operating expenses do not fully support area vocational education. (58-65)

RECOMMENDATION: State and local funding policies should be changed to encourage the following results:

-- increased use of existing AVC, community college, proprietary school, and employer training program facilities and equipment;

-- renovation and modernization of existing regional facilities;

-- regional efforts in guidance and placement;

-- improvement of programs by upgrading teachers' skills, forming closer links to manpower needs, and increasing cooperative job opportunities;

-- increased availability of proficiency examinations and credit transfer agreements to avoid duplication of training.

B. CONCLUSIONS AND RECOMMENDATIONS RELATING TO STATE AND LOCAL FUNDING POLICIES

4. CONCLUSION: Present State capital funding policies do not encourage full use of AVC and other regional facilities. Capital funds are being disbursed for vocational education facilities and equipment to local high schools in geographic areas where similar facilities at AVC's, community colleges, or nearby high schools could have been used under joint agreements. As a consequence of this disbursement, the number of students being sent to regional facilities is below the capacity of these facilities.(49-65)

RECOMMENDATION: A stronger preference for regional vocational education agencies such as AVC's should be incorporated into the present formula for allocation of State capital funds.

Among the regional agencies, relative priorities for construction and equipment expenditures should be established by formal agreements filed with the State. Such agreements should take account of:

-- manpower needs as determined by State agencies;

-- skill needs as determined by a joint advisory council;

-- the present availability of related facilities, equipment, and qualified teachers;

-- the transportation time and available means for expected students.

5. CONCLUSION: Present State operational reimbursement policies do not encourage full use of AVC and other regional facilities. Reimbursements are given to all vocational programs per student credit hour. Premiums are given to joint agreements between two or more school districts, and a further premium is given to AVC's and joint agreements between school districts and

community colleges.

The AVC "special organization" premium has lost the attractiveness it had in the late 1960's and early 1970's. Because total State reimbursements have not increased proportionately with enrollments, the reimbursements plus premium have gone from 44% of total costs in 1967 to 21% of total costs in 1975 (Table 1). The remaining share of costs is borne by local districts. As their incentive (from the premium) to send students to the AVC decreases, enrollments may drop, raising the per-capita cost for the students who remain.(49-6)

RECOMMENDATION: Reimbursement bonuses to regional vocational education providers should be increased to reflect the increased costs of these special services. If all State funds for vocational education are increased in the future, these bonuses should have high priority. If State funds are relatively constant, funds should be re-allocated away from programs serving a few small districts. The present "special organization" bonus should be increased and a minimum level of per-student-credit-hour State funding be established.

6. CONCLUSION: Present State policies aimed at eliciting local capital contributions are inadequate and inequitable. As in other aspects of education, opportunities in advanced secondary vocational education are related to affluence. Although most State educational policies attempt to alleviate the differences in opportunity that occur because of unequal distribution of wealth, the policies regarding the capital funding of area vocational education have not been entirely successful. The economically more developed areas of the State are more likely to have newer and better equipped AVC's, as they had high schools in 1965, and as they plan to have in the future.

The State's share in AVC construction can be from 40% to 60%, depending on the ability to pay of the districts joining to build the AVC. What has actually happened is that forceful, concerned educators in metropolitan suburbs and other cities have 1) made a case for 60% State funds by identifying disadvantaged persons, high unemployment rates, and labor market demand within their proposed AVC regions and 2) enlisted the local support necessary to raise the remaining 40% and use the State's allocation. Both of these successes may elude educators from more rural and/or less affluent districts. The latter may get less than 60% funding or none at all. In fact, the advanced secondary vocational education facilities in these disadvantaged districts may not even equal those provided by a single suburban local district, and present capital funding policies do not assign a higher priority to making them equal.

It should be noted that disadvantaged and unemployed persons are not allotted a minimum number of openings in the AVC's built under these policies although bonus operational funding is offered by the State. (58-65)

RECOMMENDATION: The differentials of State funding for construction of AVC's and other regional agencies should be increased, and new factors determined by the level of opportunity presently available on a regional basis should be added. The present factors of relative ability to pay should be retained. Use of these new factors should increase allocations to less affluent inner city and rural areas.

7. CONCLUSION: Present State policies aimed at eliciting local operational contributions are inadequate. Again, the formula for operational reimbursement includes significant socio-economic factors. But AVC's and other regional agencies demand a large voluntary contribution from the sending district, over and above the money received in reimbursement. In most cases, this contribution is greater than the local money spent to keep the student in his home school for the half day. Therefore less affluent districts are discouraged from participation in AVC's. Even some affluent rural districts, which, because of their industrially undeveloped nature are not oriented towards a high level of vocational training for their students, may cite budget reasons for non-participation in regional agencies. (58-65)

RECOMMENDATION: State policies should move towards providing area secondary vocational education with an independent taxing authority similar to that available to community college districts. The recommended first step is that local districts be encouraged to provide advanced vocational training to a certain proportion of their students. This training may be provided through individual high schools (in cities), joint agreements with other high schools (in densely populated areas), AVC or community college joint agreements (in sparsely populated areas where they exist), proprietary-school contracts (where available), or employer-based training contracts (where available). The choice among these alternatives should be limited by State facilities and program guidelines.

C. CONCLUSIONS AND RECOMMENDATIONS RELATING TO STATE LAWS AND GUIDELINES

8. CONCLUSION: State laws regarding AVC's have not developed in a consistent way, nor are they easily accessible to the public's understanding. Original legislation establishing AVC's was not developed as a coherent section of the School Code, but was left to ad hoc revisions and amplifications over the years. The first laws enabled joint agreements; then separate accounting was required; then the terms of joint agreements were spelled out; then several methods of bond issue and referendum passage were added; then Educational Service Regions and subsequently community colleges were enabled to participate in joint agreements. Persons connected with the AVC system are familiar with the laws and their implications. But the lack of a legislative philosophy and/or a publicized summary of AVC laws is a loss to the general public when considering the role and problems of AVC's. (41-42)

RECOMMENDATION: Illinois laws relating to all vocational education systems should be collected, coherently stated and summarized, and indexed, in a handbook for distribution by the Adult, Vocational and Technical Education section (AVTE) of the Illinois Office of Education. Greater publicity and debate should be encouraged by SACVE and others when new bills are before the Legislature.

9. CONCLUSION: State guidelines for AVC's have not reflected the experience of successful AVC's. Although AVTE can take much of the credit for the fact that recent AVC agreements reflect the tested value of joint capital and mandatory operational participation by member high schools, there apparently has been little effort to encourage the updating of older AVC agreements along the same lines.(39-46)

RECOMMENDATION: Simultaneously with the recommended demonstration of confidence in the AVC concept through a master plan, AVTE should strongly encourage presently participating high schools to re-form their joint agreements. The re-formed agreements should include a regular contribution to a building and/or equipment purchase and replacement fund, and a regular annual contribution to an operating fund. (State reimbursement factors should be applied to adjust the value of these contributions to the AVC, increasing them for example in areas of high unemployment or dropout rate; see following recommendations.) At the same time, AVTE should encourage all districts within a convenient travel radius to participate in at least some programs, according to the statewide plan.

10. CONCLUSION: State guidelines are not flexible enough to allow for demographic and geographic differences among AVC's. In the absence of detailed and coherent legislation, AVTE guidelines have been primarily responsible for the way AVC's have developed. These guidelines, however,

have not always reflected the regional differences within Illinois. For example, it appears to be easier to establish and run an AVC in the northern third of the State than in the southern third, according to interviews, because the intensity of economic development in the northern third is greater. Local interest in education for employment is higher, because the number and kinds of jobs and skill levels within jobs is greater. Per capita income is generally higher. The level of management skill among school board members is higher. Skilled teachers are more numerous. Presently, AVTE guidelines do not reflect these differences. (39-46; 49-58; 97)

RECOMMENDATION: AVTE should move towards equalization of vocational education opportunities among different regions of the State by setting up guidelines that recognize regional differences in AVC's. New guidelines should include:

-- differential cost funding enabling AVC's to attract more highly skilled, including part-time, teachers from outside the community;

-- greater transportation reimbursement for outlying districts in areas of poorer roads;

-- allowing for fewer than fifteen courses in five subject areas;

-- added-cost funding for intensive off-season training courses in regions of seasonal employment.

11. CONCLUSION: State guidelines do not reflect the experience of other States. Some of the elements of the AVC systems in five other States with economic and population characteristics similar to Illinois (Indiana, Michigan, Ohio, New York, Pennsylvania) are:

-- a tax base for AVC districts
-- reimbursement based on cost of program
-- mandatory participation in area vocational education by local districts
-- adjustable requirements for the number and variety of required courses. (46-48)

RECOMMENDATION: DAVTE should study and report on the impact and effectiveness of these guidelines and laws in other States.

12. CONCLUSION: Federal objectives for area vocational education are being met by the AVC system in Illinois. In general, Congressional and Administration concerns for increasing the opportunities for meaningful vocational education have been efficiently served by AVC's. The recent shift in Federal emphasis (since 1973) from institutional to student aid and from allocation at the Federal level to allocation at the State level should work favorably for the AVC system. The AVC's can improve their relationship to manpower needs and hence their attractiveness to students. Being regional agencies, they help to allocate State funds for training facilities economically. (39-42)

RECOMMENDATION: AVTE should present a more detailed view of AVC's in the annual State Plan submitted to the US DHEW. A special document should portray the achievements of different kinds of AVC and other regional agreements and practices, and show how positive achievements will be supported and expanded. The document should include specific proposals for area secondary vocational education for all areas of the State.

D. CONCLUSIONS AND RECOMMENDATIONS RELATING TO AVC ADMINISTRATION AND ORGANIZATION

13. CONCLUSION: Some AVC's are under-utilized when measured relative to other AVC's. All AVC's are aware of ways in which their facilities and regional services could be used to greater capacity. Some AVC's have been more successful than others. The six most important current problems causing under-utilization are:

a. Lack of high school participation. Each AVC facility was built or planned to serve a certain percentage of all students within a 25-mile radius, according to manpower needs measured in a local planning survey required for AVTE approval. All high schools within this radius were asked to contribute students and part of their annual budgets. This goal required considerable effort in the face of the traditional independence of Illinois school districts. A given AVC may have begun operations without the participation of all districts, relying on the attractiveness of the facility to lure the districts to participate eventually. Or the AVC could have been begun in an atmosphere of competition among neighboring districts of equal size for the location of the facility within their borders, and the unsuccessful district might have decided to ignore the AVC. Or budget constraints felt by the local district superintendent and board could have led the district to reject requirements for capital and operating contributions. In any case, wherever all districts within a travel radius do not participate, there is a potential for under-utilization of a facility built to accomodate them.

b. Lack of student enrollment in the AVC from participating high schools. This problem has been attributed during interviews to money difficulties primarily, and compounded by declining enrollments. However, examples were cited, during interviews, of relatively affluent communities not strongly affected by economic recession who were nevertheless blaming budget reasons for cutbacks in the number of students sent to the AVC. Unless students were replaced from other schools, the cutbacks led to empty work stations, and to greater per-student charges leading to further cutbacks.

c. Conducting fewer than three sessions. During a six-hour period of the day, it is legally possible to offer three two-hour two-credit sessions in the same space and using the same equipment. Some AVC administrators believed that the marginal cost of a third session, although probably below the average cost of two sessions, would not be covered by increased enrollments. Without adequate cost data, they said, this contention cannot be analyzed.

d. Failure to exploit possible adult education, special education, or CETA program uses, or to contract for educational services with private providers. CETA training contracts, which pay full-cost tuition to the AVC, are not yet widely available, but some AVC's have them. Special education and adult education classes are held in many AVC's under various auspices, but most directors agreed that the potential has not been fully tapped. Many of these providers of programs were not sharing the full cost of the services provided by the AVC. Thus there was no effect leading to a reduced tuition for day enrollments from participating schools. There was also potential for private contracts which had not been realized because of negotiation difficulties, insurance problems, and cost calculation difficulties with potential suppliers.

e. Errors in facilities planning which led to the construction of specialized facilities or purchase of equipment for which labor market demand or student interest had been overestimated.

f. Necessary under-utilization of specialized equipment. In a few cases, training equipment is usable only after students have completed certain other training, or is only usable for certain kinds of projects. In these cases it will remain idle for a significant portion of the school year or the school day. (49-64)

RECOMMENDATION: AVTE guidelines should take significant new steps to minimize the under-utilization of AVC facilities, coordinating such efforts with evaluations of utilization problems faced by high schools and community colleges.

a. Strongly encourage participation on an equal basis in AVC joint agreements by schools within a convenient travel radius. Include the use, under the AVC agreement, of non-AVC training facilities that may exist at nearby, previously non-participating schools. These facilities may be used as a satellite of the AVC by students from several high schools.

b. Strongly encourage the offering by local districts of a minimum number of places at the AVC. Require publication in advance of budget decisions that may decrease student enrollments in the AVC below the optimum range. Encourage the publication of admissions requirements and their standardization within an AVC district. These publication requirements should provide information to parents and students on the reasons why AVC enrollments are being expanded or restricted. Thus informed, community desire for vocational offerings, cited in interviews and questionnaires, can be better expressed.

c. Encourage AVC's to open for three sessions. AVTE can supply administrative support with ideas gleaned from AVC's currently on three sessions. Enrollments could be opened to tenth graders.

d. AVTE should acquire and apply expertise needed to establish contract relationships with CETA, adult education, and proprietary school programs. Cost data forthcoming from AVTE's Management Information System (two years away) should be used to allocate costs more equitably among users of AVC facilities. Other steps could be taken in the interim. Forms of agreements and ideas for expansion of contracts with private schools and employers should be produced.

e. Planning errors should be revealed and analyzed, and regional or statewide opportunities for exchange of excess equipment should be facilitated by AVTE.

f. The necessary under-utilization of specialized equipment should be minimized. AVTE should encourage more flexible planning of training agendas or more flexible scheduling of its use by different regional training providers.

14. CONCLUSION: The larger the number and size of participating schools and the larger the student enrollment, the more efficiently an AVC can be administered. Interviews and other sources identified administrative economies resulting from a large participation rate. A major economy was the stability of budget planning: enrollments were less likely to fluctuate from graduation and student "fads" when drawn from a larger base. Savings on

the provision of guidance and placement services could be realized also. These economies of scale are not necessarily portrayed in the current range of tuition charges -- large AVC's are just as likely to charge low, medium, or high tuitions per credit hour to their participating schools as smaller AVC's -- because the savings are obscured by other factors than size. (65-69)

RECOMMENDATION: AVTE should encourage greater enrollments in existing and planned AVC's in order to take advantage of economies of scale.

15. CONCLUSION: Recruitment efforts vary widely among AVC's. If parents and students were better informed of AVC opportunities, according to interviews, enrollments and community support would increase. All AVC's have the facilities and the opportunity to conduct information programs, such as open houses, school visits and follow-up. Some AVC's conduct regular extensive recruitment efforts beginning with contacting all ninth grade students in participating schools. Other AVC's encountered restrictions on their access to ninth and tenth graders; others simply did not put forth significant publicity efforts. (65-73)

RECOMMENDATION: As part of a Statewide plan to advance interest in vocational education, AVTE should require that all providers of vocational education -- high schools, AVC's, community colleges (and private schools, and employers if their contribution can be obtained) -- provide ninth graders with information on the services which the public education system will provide. Information gathered by AVTE on exemplary recruitment programs should be disseminated to AVC's and incorporated in their plans.

16. CONCLUSION: AVC's with a regional basis of organization have more community support, which is often translatable into higher participation rates

and more stable funding. There are several elements which give a "regional" basis to an AVC agreement:

-- joint contributions to capital funds;

-- commitment to pay a certain share of operating expenses regardless of the number of students sent;

-- administration by an Educational Service Region rather than a district;

-- lay members of a board of control;

-- a separate facility not attached to a district high school.

In contrast are AVC's with these characteristics:

-- the board of control is the same as the school board of the administrative district;

-- the facility was built entirely by and is attached to the administrative district high school;

-- the AVC has historically resorted to the administrative district high school to make up enrollment drops from outlying districts rather than engage in a stronger recruitment effort.

The latter type of AVC is less likely to be seen, in the words of the AVC planning guide, as an extension of the campus of the participating schools, or to generate an intangible pride in shared achievement. (49-73)

RECOMMENDATION: AVTE guidelines for funding approval should include steps towards regionalization of existing AVC agreements as well as endorsements of the above regional characteristics for future planning of joint agreements of all types.

17. CONCLUSION: The concept of local advisory councils is not being fully exploited. The level of their contributions to program planning, placement, and other administrative functions varied widely among AVC's. Advisory councils that met often, were consulted regularly on important decisions, and had a regional outlook were considered extremely useful to AVC's in generating community support, enrollments, and placements. Joint

advisory councils with community colleges were considered an important step towards the improvement of program articulation. (68-69)

RECOMMENDATION: Continued emphasis should be placed by State authorities on the use of advisory councils by regional vocational agencies at all levels. Even after programs are established and running well, advisory councils may assist in recruitment, placement, and curriculum planning. Evidence of such continued consultation should be required.

18. CONCLUSION: AVC's are not in the lead in providing services to disadvantaged youth because high schools have asserted the central role in providing these services. The major factor in this assertion, cited in interviews, was the desire by high schools, concurred in by AVC's, to avoid stigmatizing disadvantaged youth as much as possible. It was believed that this stigmatization would be emphasized if disadvantaged youth were sent as a distinct group to the AVC. Currently, persons identified as disadvantaged by their home high schools are enrolled in regular programs at the AVC. (65-77)

RECOMMENDATION: As AVTE and IOE gradually refine the identification of and program design for special students, AVC's should be given consideration as a source of facilities for special vocational educational programs. These programs could amplify a regular vocational course with related remedial work and additional practice and be held during a following session, after regular school hours or during summer.

19. CONCLUSION: AVC's are not in the lead in providing services to physically and mentally handicapped persons, again because high schools have asserted the central role in providing these services. Physically and mentally

handicapped persons, if offered vocational education, are often given programs at special facilities or by teachers other than those at the AVC. In some cases AVC programs may be considered too difficult for the physical capacities of physically handicapped persons or for the mental capacities of mentally handicapped persons. (65-77)

RECOMMENDATION: AVC's should be considered as regional providers of specialized vocational education services, including recruitment, training, and placement. Additional transportation facilities, including special vehicles, and specialized training equipment should be used to increase opportunities.

20. CONCLUSION: The regional orientation of guidance services can be improved. Often, according to interviews, students were unaware of statewide or commuting-region manpower needs trends. Data from questionnaires shows that AVC's are effective agencies in producing a broad outlook on employment and training opportunities. (71-74)

RECOMMENDATION: The regional responsibility of AVC guidance staff should be emphasized in planning, and additional State funding should be considered for this function. Possible steps would be annual workshops for all AVC (and other regional agency) guidance coordinators, to be followed by workshops held at the AVC for participating and non-participating high school guidance officers. The subject of these workshops would be the identification of aptitudes, interests, and abilities of potential AVC students.

21. CONCLUSION: Criteria for selection of students to attend AVC's are not standardized or published. It was suggested in interviews, and confirmed by the Participating High Schools questionnaire, that the main factor in the decision to send a given student to the AVC is the personal assessment of the high school guidance counselor. This assessment, according to interviews, was often made on widely varying grounds at different schools participating in the same AVC. One school (sometimes the large administrative district high school) would send its low achievers and discipline problems, and another would send the ones with the best grade average and socially acceptable personality traits. Although standardized tests of aptitude and interest (for example, the Armed Services Vocational Aptitude Battery) were administered to all ninth or tenth graders at a few schools, at others they were administered only at the request of the student, and in both cases were not used as major selection criteria. The use of disparate selection criteria often had negative effects on the "image" of the AVC, on the motivation of some students, and hence on the learning atmosphere in classes, according to interviews. It was believed that if positive rather than negative selection criteria could be emphasized, all students' motivation could be improved. (49-74)

RECOMMENDATION: The selection criteria used for selection of students to any joint-agreement or limited-enrollment program should be published as part of the local Plan, and should be encouraged to show progress towards standardization by agreement among participating schools. State standards should be limited to a description of the types of criteria to be used and guidelines for their publication and dissemination.

E. CONCLUSIONS AND RECOMMENDATIONS RELATING TO ARTICULATION OF PROGRAMS WITH OTHER PROVIDERS OF VOCATIONAL EDUCATION

22. CONCLUSION: The roles of AVC's, high schools, and community colleges are not strictly defined. The roles, broadly stated, are these:

-- high schools' goals are to provide persons within their districts with vocational orientation if advanced vocational education is available elsewhere (e.g. through joint agreements); or with advanced vocational training themselves if the district wishes to fund this training; or with guidance towards post-secondary training opportunities if it does not.

-- AVC goals are to provide specific occupational skills needed by the labor market of a broad region, and to serve students of different levels of ability and previous training.

-- Community colleges intend to serve any resident of the State needing occupational education, at a small cost to the student. Their primary perceived responsibility is to serve adult learners, and to provide both beginning courses and levels of training more advanced than those at AVC's or comprehensive high schools. (74-81)

RECOMMENDATION: AVTE should encourage each group of providers to further define its current and anticipated role. Each institution should provide comparable data on programs, proficiencies, facilities, placements, and students served. Parameters showing the place each group occupies would be available to inform students and funding authorities of the best path to an articulated career education within each region.

23. CONCLUSION: There is insufficient institutional coordination among high schools with orientation programs, AVC's, and community colleges. Participating high schools and AVC's coordinate with each other on a one-to-one basis, but according to interviews and supported by questionnaires, there

is rarely an AVC-district-wide attempt to allocate resources towards leveling out the preparation received in orientation programs. Coordination between AVC's and community colleges is often more difficult, as each may have more than one of the other to deal with. In a few cases, agreements have been reached on the transfer of credit from an AVC to a CC, and in more cases, the CC will administer proficiency examinations for credit. These arrangements are more likely to occur if the AVC and CC service regions are similar and public demand has been felt. However, this degree of coordination has not been reached in many areas where it would benefit students. (77-81)

RECOMMENDATION: AVTE and the Illinois Community College Board staff should disseminate examples of coordination among high schools, AVC's, and CC's. The State authorities should indicate lines of contact according to a statewide plan for vocational education, and evaluate proposals for such coordination in local Plans. Formal agreements on specific transfer of credits from AVC's to CC's should be stressed. The publication and dissemination of these formal agreements will encourage enrollments at the AVC's and CC's that have them.

24. CONCLUSION: There are geographical and program areas where some duplication of offerings among high schools, AVC's, and community colleges is unavoidable. The geographical areas are those in which the present locations of AVC's and CC's are not convenient to the same population. An AVC may be separated by 20 miles from a CC, and offer similar advanced training to persons twenty miles in the other direction who are unwilling to travel forty miles. In the area between the two institutions, there will be an overlap of offerings. Program duplication may occur when a rapid growth in demand for a certain skill occurs, and both institutions establish programs

that may be under-enrolled if demand drops off. (77-81)

RECOMMENDATION: Necessary duplication should be minimized by better geographical and manpower needs planning at the State level. This planning must occur before State approval is given for construction, equipment purchase, or program funding. The burden of proof of non-duplication or special circumstances should lie on the proposer of the program. Additionally, greater flexibility in teacher hiring and layoff should be encouraged to allow for quicker and cheaper response to manpower needs changes.

25. CONCLUSION: There are geographical and program areas of potential rivalry between AVC's and nearby participating and non-participating high schools. AVTE, responding to increased demand for more vocational programs throughout the State, has allocated funds to individual high schools and to joint agreements among a few high schools to equip and operate improved programs. In some cases, according to interviews, these programs attract students who might attend a nearby AVC for a similar program. The resulting drop in AVC enrollment causes a sudden increase in tuition charges to all students; even if the enrollments are subsequently made up from other participating schools, there is often a time lag of one or two years. (77-98)

RECOMMENDATION: AVTE should alleviate the effects of this funding policy. The State could automatically raise the operating reimbursement to AVC's for two years whenever it raised reimbursement to participating high schools or other joint agreements. Or it could strongly encourage the temporary maintenance of tuition payments by schools withdrawing students from the AVC in order to send them to a new State-funded program. In either

case (or a combination) the negative effect on AVC's or other regional agencies would be cushioned to the benefit of remaining participants. The additional reimbursements should be available for increased recruitment, teacher re-training, or new programs to increase opportunities at the AVC.

26. CONCLUSION: There are geographical and program areas of potential rivalry between AVC's and community colleges. The rivalries appear as similar offerings to 11th and 12th grade students by under-utilized AVC and CC facilities located near each other. The CC may be able to charge high schools a lower tuition rate per credit for an equal- or higher-cost program because it receives reimbursement for such programs from both AVTE and the Illinois Community College Board. In some cases, this situation may encourage AVC participants to switch from the AVC to a CC joint agreement. Otherwise well-utilized CC's often have unused capacity in the middle of the day, which may be opened to secondary students. Although the high school oriented guidance services provided by the AVC under current AVTE guidelines are not provided by the CC joint agreements now in force, the prestige of going to a community college is affecting student choice and may positively affect employer evaluations of training. The law allowing CC joint agreements to grant high school credit and to negotiate a tuition rate has just recently taken effect, and other data for evaluation is not available. (77-98)

RECOMMENDATION: AVTE and ICCB should supervise special guidelines for joint agreements among high schools and community colleges. This supervision should reflect an evaluation of the services rendered, the possibility of saving money by eliminating multiple reimbursements, and the geographic and

manpower needs figures for areas of potential rivalry as revealed by a State master plan. In areas where the plan shows high school-CC joint agreements to be the most efficient choice for advanced vocational education, these agreements should reflect the standards recommended for AVC agreements in this report.

F. CONCLUSIONS AND RECOMMENDATIONS RELATED TO MEETING MANPOWER NEEDS

27. CONCLUSION: The establishment of job-related, performance-based competencies is not a high priority. The considerable effort that would be required from each AVC to evaluate the components of its own training programs and to translate those evaluations into generalized competencies has not been undertaken in most cases. Some AVC's, teachers, and advisory councils have worked together to establish specific competency criteria within a given program area. Some AVC's, according to interviews, believe strict competency assessment would not be worth the effort, because of the extremely diffuse nature of the labor market faced by their graduates. In these cases, it is believed, employers themselves are not able to predict exact skill needs, and hire on the basis of general experience and personality factors. Other AVC's, in more economically developed areas, set very specific job slots as their training goals, and prefer to teach specific competencies. (82-84)

RECOMMENDATION: Further impetus for the establishment and use of performance based competencies should come from AVTE. Students benefit from a continuous effort to link their in-school training to actual jobs. Some of the necessary performance descriptions could come from work already done by AVC's and their advisory councils. A well-articulated list of competencies may eventually be used as one of the bases for reimbursement for vocational programs at all levels, from high school through community college.

28. CONCLUSION: Graduates of AVC's and occupational programs of comprehensive high schools enter the labor market in very roughly the same proportions. However, evidence indicates that the controlling factors for labor-market entry are societal, and the predictive value of AVC versus comprehensive high school attendance is low. (75-98)

RECOMMENDATION: AVC's should not be considered in contrast to well-established comprehensive high schools in larger cities in terms of their performance in meeting labor-market needs. Rather, in the development of a master plan, in urging choices on local authorities, and in channeling reimbursements, AVTE should consider the types of services which each can offer. These services should be equivalent; the only major differences should be in transportation costs, land acquisition, teachers' salaries, and other items which have different prices within and outside urban areas.

29. CONCLUSION: Programming, placement, and follow-up procedures vis-a-vis labor market needs varied widely among AVC's. Their formal organization is usually better than at other high schools.

Programming is relatively inflexible partly because of teacher tenure at many AVC's, especially those whose teachers participate in tenure, salary, and collective bargaining systems of an administrative district high school.

Placement procedures are generally loosely organized. As this study's questionnaire data shows, AVC teachers and counselors rank low on graduates' lists of job and school information sources. But most teachers and all counselors consider themselves important to a recognizable placement effort. It was suggested in interviews that the amount of effort devoted to and success in placement activities was related to the esprit de corps of an AVC, its attractiveness to students and employers, and the support of the community as a whole. Personal relationships between counselors and teachers and employers led to successful placements over the years as much as a general conviction that AVC graduates were well-trained.

Follow-up procedures were generally well-organized, per AVTE requirements, but coordination of these efforts with those of participating high schools and with the enrollment records of community colleges was not always present. (65-84)

RECOMMENDATION: Examples of superior programming, placement, and follow-up procedures should be disseminated and used as models for State guidelines by AVTE.

30. CONCLUSION: There is little coordination of job placement efforts among comprehensive high schools, AVC's, CC's, and community-based employment services. Interviews and questionnaire responses indicated that the main reason for this lack of coordination is the perceived difference in labor-market and geographical service areas. Secondary reasons were the lack of worthwhile job market information for high school graduates other than personal contacts; and the differences in skill levels reached by the persons served by each placement program. There are several pilot programs

sponsored by AVTE attempting to coordinate placement and job-market information services on a regional basis. These programs are rated highly by the AVC's and community colleges that participate. (65-84)

RECOMMENDATION. The Illinois Office of Education and the Illinois Community College Board staff should establish standardized student-oriented services of placement and job-market information to be provided to every student in the State. The State master plan should indicate the regional agency to be responsible for coordination of that information and its delivery to each school district. Funds should be allocated from the State for these services, taking into account by formula unemployment rates, dropout rates, and the present cost to the State of services already provided through community colleges, AVC's, and high schools, and the State Employment Service. Matching funds should be encouraged from local districts to support regional services.

31. CONCLUSION: The administrative responsibility for cooperative vocational education programs is not shared according to rational criteria. Cooperative programs are widespread in Illinois, and serve many vocational students, especially in the eleventh and twelfth grades. There is evidence that some cooperative placements should be made available through regional agencies, and that others should be the responsibility of local districts. (58-65)

RECOMMENDATION: AVTE guidelines for cooperative programs should indicate whether local or regional agencies should operate the programs. The preference should be established by information from State and local manpower surveys and from advisory councils. Local agreements should codify the responsibilities of each agency.

G. CONCLUSIONS AND RECOMMENDATIONS RELATING TO OTHER SECONDARY VOCATIONAL EDUCATION INSTITUTIONS

32. CONCLUSION: Some differences exist between the qualifications of AVC and other high school vocational teachers. The significance of these differences varies from AVC to AVC. AVTE requirements for both groups are the same. In some AVC's, many of the teachers were hired from the occupational education department of the administrative district high school or from a participating school; thus they represent essentially identical qualifications. Salary scales, conditions of tenure, and length of annual contract are also often identical between high schools and AVC's. For these reasons, some AVC's are unable to take advantage of their regional status by hiring teachers on a part-time, or semi-annual, or other more flexible basis. Information from interviews suggests that better teachers could be attracted to AVC's because teachers could expect their students to be more highly motivated than at a regular high school. In addition, newer AVC's have been able to hire teachers with more recent occupational experience. AVC's with a regional type of organization have been able to resist pressure to automatically hire teachers from participating schools. (65-69)

RECOMMENDATION: AVTE should continue efforts to improve teacher retraining, requiring matching funds from local districts through AVC's, and its guidelines should emphasize recent occupational experience for AVC teachers. Programs for automatic periodic evaluation of the recentness of occupational experience and general competence in teaching advanced skills

should be encouraged for all recipients of reimbursement funds. Flexible contract and tenure agreements should be encouraged.

33. CONCLUSION: AVC students (and other students who travel within a multi-school district to attend occupational programs) have a more positive self-concept than other high school vocational students. This conclusion is based on interviews and questionnaire responses which suggested that the act of traveling to a different school was inherently prestigious and reinforcing. The relative positiveness of the self-concept was directly related to two important factors: the overall image of the AVC, as conveyed by its facilities, teachers, and efforts to advertise itself; and the general admissions criteria used by local counselors in selecting students to attend. The differences in self-concept between AVC and non-AVC vocational students is blurred where a large number of AVC students attend from a nearby, sometimes attached, high school. (84-98)

RECOMMENDATION: The personal values of an improved self-concept among vocational students are high, and AVC administrations should be conscious of the effect of the above factors on this self-concept. Recruitment, physical appearances, and published admissions standards are areas where this consciousness is important. AVTE should evaluate AVC and other regional providers' efforts in these terms.

CHAPTER II

INTRODUCTION AND METHODOLOGY

A. Introduction

The Illinois State Advisory Council on Vocational Education, pursuant to its mandate to conduct periodic assessments of the vocational education opportunities in the State, sponsored this study of the Area Vocational Center system. There are presently twenty-nine operating Area Vocational Centers (AVC's); this number has been increasing steadily since the first AVC's were established in 1966. In 1971, an assessment of progress to date, which examined the seventeen then operating centers, was undertaken at the request of the Division of Adult and Vocational-Technical Education (AVTE). The present report updates the 1971 study and discusses issues which have arisen since then.

The following topics will be discussed in sections of this report:

-- methodology of the study (Chapter II)

-- history, analysis, and future expectations of State administrative policy regarding AVC's (Chapters III and IV)

-- description of factors which have led to the diverse educational capabilities and financial situations of AVC's (Chapters III and IV)

-- conclusions drawn from data gathered for the study (Chapters I and IV)

-- recommendations, directed towards State and local authorities, based on those conclusions (Chapter I).

B. Methodology

The varied research tasks of this study responded to our belief that

many sources would be needed to illuminate the complex structure of the AVC system, and to identify the many alternatives which deserved consideration as recommendations. This belief proved to be justified, as subsequent conclusions show that AVC goals could better be reached by an increasingly flexible and accomodating structure of area vocational education. The research tasks were:

1. meetings with an advisory committee of AVC directors;
2. interviews at each of twenty-nine operating AVC's;
3. two thousand questionnaires of eleven different types;
4. gathering of data from State sources and interviews;
5. interviews of AVC authorities in five other states.

The tasks are described in the paragraphs below.

1. Meetings with an advisory committee of three persons, chosen from among their membership by the AVC directors as a group. This group met three times with project staff in Springfield. At the first meeting in February, the committee reviewed drafts of research issues, interview guidelines, and questionnaires. At a second meeting in March, the committee reviewed pilot test results (from visits to two nearby AVC's) and final questionnaires. At a third meeting in May, the committee commented on preliminary findings and recommendations. In each case the committee's advice was freely given, and incorporated into the research design where deemed appropriate by the project staff.

2. Interviews at twenty-nine AVC's. Project staff conducted one-day visits to each AVC, interviewing the Director (except at Kankakee and Springfield, where they were unavailable) and in some cases the guidance

coordinator or other staff. The interview guidelines are reprinted in Appendix D, and narrative reports on the individual schools based on notes taken by the interviewer make up Appendix A. The interviews covered the following topics:

a. the history of the AVC, the nature of the human and geographical constituency served, goals and achievements;

b. an analysis of trends in enrollments, school participation, expenditures, and placements;

c. a discussion of the present administrative policies relating to AVC's;

d. relationships and policies regarding nearby community colleges;

e. expectations for the future, including the potential manpower needs of the constituency, program plans, budgets, and funding sources.

3. Questionnaires. The numbers of each type, the method of distribution, and the response rates are given in Table 2. Respondents were selected as follows:

-- AVC Programs and Facilities: 29 operating AVC's.

-- Employers and Labor Organizations: AVC Directors were asked for the names of three employers and two labor organizations qualified to respond concerning AVC graduates. All AVC's provided three employers' names, except one which had been in operation less than a year. Four AVC's did not provide the names of labor organizations due to lack of labor union activity in their predominantly rural service areas.

-- Participating High Schools: all received questionnaires.

-- In-school seniors, graduates, and teachers were chosen at random from lists of names supplied during AVC visits. For in-school students, selections were made from class lists. The likelihood of selection of any class section was proportional to the enrollment of seniors in that section, and the likelihood of selection of any individual in that section was equal. Graduates and teachers were selected from universe lists or card files. The number sampled at each AVC was proportional to the enrollment within three equally-represented categories: under 500, between 500 and 1,000, and over 1,000 pupils. The numbers sampled are displayed in Appendix A.

TABLE 2.

QUESTIONNAIRE DISTRIBUTION AND RESPONSE

QUESTIONNAIRE	SAMPLE	METHOD OF DISTRIBUTION	NUMBER DISTRIBUTED	NUMBER RETURNED	PERCENT
A. Programs data from AVC Directors	All	Mailed prior to interview	29	29	100%
B. Facilities data from AVC Directors	All	Mailed prior to interview	29	29	100%
C. Employers	Three suggested by each AVC	Mailed by AVC (follow-up by UCI)	84	59	70%
D1. In-school students	750 random selected by UCI	Administered in school by interviewer	760	760	100%
D2. AVC graduates	750 random selected by UCI	Mailed by AVC	750	264	35%
E. Participating high schools	All	Mailed by AVC (follow-up by UCI)	320	216	68%
F. Teachers	150 random selected by UCI	Distributed by AVC	150	121	81%
G. Comprehensive high schools	30 large non-AVC high schools	Mailed by UCI (follow-up by UCI)	30	18	60%
H. Community colleges	All except Chicago	Mailed by UCI (follow-up by UCI)	38	32	84%
I. Labor orgarizations	Two suggested by each AVC	Mailed by AVC (follow-up by UCI)	50	13	26%
J. CETA sponsors	All	Distributed at monthly meeting	19	5	26%

-- Comprehensive High Schools were selected from the thirty largest cities outside of Chicago and its larger suburbs. A list of those selected is displayed in Appendix D.

-- Community Colleges and CETA Sponsors: all of both groups received questionnaires.

4. State sources included interviews and data from the Division of Adult and Vocational-Technical Education of the Illinois Office of Education, the Illinois Community College Board, and the Governor's Office of Manpower and Human Development.

5. Five other states responded to interviews regarding the characteristics of their systems of area secondary vocational education: Indiana, Michigan, New York, Ohio, and Pennsylvania.

CHAPTER III

AREA VOCATIONAL CENTERS AND GOVERNMENT POLICY: CONCLUSIONS RELATING TO LAWS AND GUIDELINES

Although the traditions of local control of educational offerings are strong in Illinois, the State has for many years sought to influence the nature of the services provided and to expand the opportunities to its citizens in areas where local interests are transcended by those of the State as a whole. In no area of public vocational education has the State's influence been more strongly expressed than in the development of the Area Vocational Center system.

This chapter describes the State's goals for AVC's and the legislative and administrative tools it has used to achieve them. Illinois first established AVC's in 1965, when Federal funds were made available under the Vocational Education Act of 1963. It will be useful to take a brief look at the Federal view of AVC's over the ten years since then.

National concern for the provision of more advanced technical skills than had previously been taught under most high school programs appears to have grown with the concern for better scientific and technical education fostered by the launching of Sputnik in 1957. In imitation of the Soviet Union's (and other European countries') programs of "technical high schools," it was believed that American high school students should be encouraged to pursue more complex skills while in high school, giving them a head start on a technical career and improving the capabilities of America's work force.

The VEA of 1963 committed the Federal government to the support of area vocational planning and facilities. It was believed that area vocational programs would provide the more complex skills needed efficiently, by spreading out the higher cost of equipment and teachers needed and by offering opportunities to a limited number of students from several different high schools. Federal funds for construction and equipment were increased in 1968. The criteria for distribution are:

1. Manpower and job opportunities

   -- current manpower needs and job opportunities.
   -- projected manpower needs and job opportunities.
   -- new and emerging manpower needs and job opportunities at local, State, and national levels.

2. Differences in vocational education needs

   -- persons in high school.
   -- persons who have completed or left high school and who are available for study in preparation for entering the labor market.
   -- persons who have already entered the labor market and who need training or retraining to achieve stability or advancement in employment.
   -- disadvantaged persons.
   -- handicapped persons.
   -- additional financial burdens of local education agencies caused by the necessity of providing students with special education programs and services.

3. Relative ability to provide resources

   -- wealth of areas of communities served by local education agencies within the State in relation to number of students each is educating.
   -- per capita income of areas served by local education agencies within the State.
   -- areas designated as economically depressed or high unemployment shall be given priority.

4. Relative costs of programs, services, and activities

   -- differences in cost to local education agencies of materials and services due to variations in price and wage levels or other economic conditions existing in areas served.
   -- differences in excess costs to local education agencies due to need for supplying special services not usually part of cost of education provided by other local education agencies in the State.

Funds may decrease in the future due to Congress' belief that present facilities are not being fully utilized.[1] In other respects, however, the Federal involvement in the actual policy decisions regarding AVC's has been minimal.

The Illinois legislation regarding AVC's is part of the Illinois School Code (Chapter 122), but is scattered throughout that bulky volume and difficult for even a specialist to collect for analysis.[2] The body of legislation may be summarized by saying that it appears to respond to specific proposals regarding the administration and construction of AVC's.

For example, there have been several acts passed regarding the kinds of authorities that may participate in a joint agreement (the "Constitution" of an AVC). The first, in 1965 (S.B. 648) enabled "school districts" to participate; H.B. 2432 (1969) enabled county (or Educational Service Region) superintendents to participate; and S.B. 0167 (1975) enabled community colleges to participate. According to information gathered in interviews for this study, each of these changes reflects a specific proposal by an authority who wished to establish a particular joint agreement, rather than a coherent theoretical approach to the issue.

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[1] "What is the Role of Federal Assistance for Vocational Education?" digest in U.S. Congress House Committee on Education & Labor, Vocational and Occupational Education, Volume I. 94th Congress, 1st Session, Washington: U.S. Government Printing Office, 1975.

[2] The following sections of the Code are relevant to AVC's and some might require amendment if some of the recommendations of this report are to be adopted: pertaining to the establishment of joint agreements, 10-22.31a, 3-7, 3-15.1, 10-17, 3-15.4, 10-22.31b, 17-2.4, 10-22.20a, 19-30; pertaining to transportation, 10-22.22, 29-5; pertaining to construction, 35-5, 35-10, 35-30.

Because of the ad hoc and "ratifying" nature of AVC legislation, we must look to the administrative guidelines formulated by the office of Adult and Vocational-Technical Education (AVTE) of the Illinois Office of Education (IOC) in order to understand the AVC "policy" of Illinois.

AVTE guidelines have been written down, but are in a perennial state of flux, partially reflecting the encouragement and complaints received from AVTE's constituency. The power behind the guidelines is the power of funding for approved programs: presently AVC's and other "special organization" consortia receive a 30% bonus of the State's per-pupil reimbursement, and other joint agreements and vocational programs receive smaller bonuses. AVC's are a unique and distinguishable section of AVTE's constituency, because of the large part played by AVTE in the original establishment of individual AVC's and in the relative importance of the office as a funding source, compared with the vocational programs of high schools and community colleges. Persons interested in AVC guidelines and their interpretation have been able to receive the assistance of AVTE consultants.

The written guidelines have been collected in two publications of AVTE: Area Secondary Vocational Center Planning Guide (1971), the Table of Contents of which is reproduced as Figure 3, and Criteria for Program Approval and Financial Support (1973). Using these documents and information from the interviews on how the guidelines have been interpreted and followed, it has been possible to identify the key policies which have affected the development of AVC's. A list follows.

FIGURE 3

CONTENTS

Area Secondary Vocational Center Planning Guide

Area Center Development

1 Participating Schools
2 Need for An Area Center
2 Criteria for Area Center Approval
3 Three-Phase Procedure for Approval
4 Time Schedule for Submitting Proposals

Steps for Planning an Area Center

5 Initial Planning
6 Phase I – Development of a Proposal
9 Phase II – Development of Educational Specifications
15 Phase III – Development of Facility Plans
18 Procedures and Recommendations Following Phase III Proposal Approval

General Information

21 Federal and State Terms and Conditions for Approval of Projects
24 Matching Requirements and Purposes
24 Disposition of Facilities and Equipment
24 Area Center Planning Contract Guidelines
25 Continued Approval of Area Centers
25 Approval of Future Area Center Concepts
26 Proposal for an Addition to an Existing Area Center Facility

27 **Description of Terms**

39 **Aids for Area Center Planning**

1. The formation of joint agreements. The joint agreement is the document signed by legally empowered representatives of individual school districts, ESR superintendents, or public institutions of higher education to establish joint educational programs, including AVC's. The School Code says that agreements shall include, but not be limited to, "provisions for administration, staff, programs, financing, housing, transportation and advisory body ..." (Ch. 122 Sec. 10-22.31a). This relatively open-ended requirement has not been significantly amplified or constricted by AVTE guidelines, although the office is currently recommending that capital and operating fund commitments by the participating schools be made part of joint agreements.

2. The identification of regional manpower needs, the planning of facilities to meet those needs, and the use of local advisory councils to plan and refine programs and curriculum in the future. This group of factors is incorporated into AVTE guidelines to insure that an AVC will provide meaningful vocational training with a good chance for placement of its graduates in fields for which they were trained. The phrasing of the guidelines is general, and they reflect the language of Federal objectives in the VEA. AVTE guidelines require a comprehensive regional survey of employers to be conducted by the AVC planning agency; careful study before approval of facilities plans; and the establishment of advisory councils in each major occupational area. The guidelines are, however, applied to the earlier stages of AVC approval and are not maintained specifically as a funding criteria therafter.

3. The requirement for fifteen courses in five occupational areas. Although some presently operating AVC's do not meet this guideline, it is

one of the most definite. At first glance, it appears unnecessary for area vocational education; logically, if only a few kinds of jobs are available in a given area, the AVC might be set up to train only for those. However, this guideline represents an attempt by AVTE to secure two advantages to the State: insuring that the facilities built will have economies of scale; and that AVC's will be encouraged to train persons who might migrate to areas where other kinds of jobs are being offered, or who might be needed if a sudden shift in the occupational mix occurred.

In fact, AVTE funds other joint agreements which may offer as little as one program to as few as two school districts, although at a lower rate than for AVC reimbursements.

4. Guidelines for the contracting of programs with private sources. Such guidelines are conspicuously absent. Copies of contracts must be submitted for approval, but the educational evaluation is left up to the AVC (and in some cases to the State licensing board for the program).

5. The composition of the board of control of the AVC. Again, guidelines are lacking. It has been left up to the individual joint agreements to specify the membership, powers, and duties of the board of control. Section 3-15.14 of the School Code requires that boards of control of ESR administered cooperatives shall be made up of one member from each cooperating district and one member from the office of the regional superintendent, but says only that the board will "set policy" for the cooperative.

6. Transportation arrangements for AVC's. Transportation is left up to participating schools, who receive an 80% higher rate for students sent

to AVC's.

7. Teachers', administrators', and ancillary-service personnel contracts, salaries and qualifications. There are definite guidelines for qualifications of teachers and other AVC personnel, but no guidelines for teacher contract length or salary. The guidelines thus do not take into account the needs for differences between AVC's and other providers, or for differences among AVC's themselves.

This summary of Illinois guidelines has been brief because, although they are the matrix upon which AVC's grew, their effects have spread in different directions. The channels of policy have been cut and re-cut by the effects of the passage of time, changes in personnel, economic constraints, and the other accomodations which policies must make when they try to affect a state as large and diverse as Illinois. Chapter IV describes the varied results of this process.

The Area Secondary Vocational Experience of Five Other States

The project examined the experiences of five other states with economic, demographic, and geographic characteristics similar to Illinois'. It is believed that tentative conclusions and potentially valuable recommendations can be drawn from these experiences. The brief survey showed that several problems were common to all the states; approaches to some problems were remarkably similar, and to others divergent. Table 3 shows the responses of six states (including Illinois) to selected questions. The questionnaires used as interview guidelines are reproduced in Appendix D.

TABLE 3.

SIX STATES WITH AREA SECONDARY VOCATIONAL CENTERS

Characteristics	Illinois	Indiana	Michigan	New York	Ohio	Pennsylvania
1. Name of system	Area Vocational Centers	Regional Vocational-Technical Centers	Area Vocational System	Boards of Cooperative Educational Services	Joint Vocational School Districts	Area Vocational-Technical Schools
2. Time spent by students	Half day, every day	Same	Same	Same	Full day, every day	Varies throughout year for each student
3. Distance traveled	25 miles recommended	Same	Same	Same	Same	Same
4. Minimum program offering	15 programs in 5 areas	5 areas, no minimum number	15 programs in 6 areas	5 programs, no required variety	12 programs, 20 sections, maximum of 4 cooperative	No; goal of 10 programs
5. Fraction of 11th and 12th graders served (000)*	18/316 = 5.7%	12/185 = 6.5%	20/277 = 7.2%	44/600 = 7.3%	35/308 = 11%	64/300 = 21%
6. Local funding	Contributions	Same	An intermediate school district tax base for the AVS	BOCES capital and administrative costs must be shared by all districts	Participating districts vote a millage for the JVSD	When AVTS budget is approved by a majority of participating districts, each district pays for operations regardless of the number of students sent in the year.

* *Estimated.*

Source: Telephone interviews; Illinois data from personal interviews.

To summarize the data from the interviews with AVC authorities in five other states, it can be said that area vocational education is an important part of their systems. Interestingly, however, most of the respondents said that the number of AVC's planned had nearly reached a stopping point in the last two years or so. Until 1974, the numbers had grown steadily; since then, it had become more difficult for each new center to establish itself. Capital appropriations were leveling off also. It was believed in two states that "prime" regions for area centers had been covered, and that future growth would have to occur in "marginal" regions--these regions being the more rural and less wealthy areas of their states. No state possessed an updated "master plan" that mandated the future growth and complete coverage of the state by area secondary vocational centers of a particular kind. All were exploring the use of community college facilities as a possible future provider of high school vocational credits.

The relevance of the five states' experience to Illinois includes the following major points:

-- area secondary vocational education is a widely successful approach to the vocational education goals of large states with contrasting mixtures of urban and rural, industrial and farming economies.

-- reimbursement formulas for AVC's are roughly similar. Some states:
  -- do not emphasize labor-market demand priorities;
  -- weight unemployment and dropout rates more heavily;
  -- establish cost-of-program factors, and guarantee minimum reimbursement on a per student credit hour basis.

-- the following changes in educational characteristics should be considered: greater flexibility in length of attendance; greater flexibility in minimum program variety requirements.

-- changes in the nature of AVC agreements should be considered, to give them a tax base or other minimum for operational expenses.

CHAPTER IV

THE ILLINOIS AREA VOCATIONAL CENTER SYSTEM IN 1976: GOALS AND ACHIEVEMENTS

This chapter presents the research information gathered about Area Vocational Centers (AVC's) by this study. The seven major categories of goals and achievements which form the basis for this chapter are:

-- goals of the number of students served

-- goals of facilities and equipment

-- goals for administration, guidance, and placement services

-- goals for program offerings

-- goals for articulation of programs

-- goals for meeting the State's manpower needs

-- goals for planning regional vocational education

A. Goals of the number of students served

In the original concept of AVC's, all districts below a certain size were to participate in an AVC in order to provide their students with higher cost and/or low opportunity programs which the individual districts were unable to fund separately. This goal met obstacles in several situations.

Small and rural school districts were often logically grouped around a larger town or city which served as a shopping, health-care, and light-industry center. Such a town did not participate as an equal in an AVC agreement; it dominated the choice of location and program planning. Because of the economics of capital formation, the local funds needed to match

State and Federal building programs were most easily tapped by the central district. Bonds were more readily issued by districts with a broad wage and tax base. In the rush to get AVC's started in the first three years after 1965, most were located within the plants of the high school of the large central district. Tables 4 and 5 show the proportions of pre-1970 AVC's located in and funded by centralized districts.

Other anomalies appeared. The corollary of the original concept was that districts above a certain size should support their own system of specialized training, drawing students from the several high schools to the location of the program. However, the large city of Rockford has an AVC; Peoria and East St. Louis do not: Chicago had one, now no longer considered a multi-district area center. The reasons for this disparity are not clear, but it appears that in spite of the original concept, the way was open for an energetic large-city district to establish an AVC if it wanted to and could get neighboring participants. Again, the AVC was put in the central district, and the capital-funding needs made it difficult for a separate group of smaller districts to come up with the capital that a single large district could supply.

What has been the effect on the number of students served in 1976? As can be seen from Table 5, most AVC students come from the larger administrative districts. If the information is presented according to the time of establishment, the preponderance of large-district students is most striking for the older centers. However, this division also indicates that the proportion is decreasing in new AVC's, as enrollments are decentralized. Until these newer AVC's become a majority, it is probable that the greatest proportion of AVC students will continue to come from administrative district

TABLE 4.

ESTABLISHMENT DATE VERSUS REGIONAL NATURE

Date operational	Average % participation by administrative district schools	Facilities attached to administrative district schools	Capital investment by administrative district
Before 1970 (17 AVC's)	59%	11 AVC's	12 AVC's
After 1970 (8 AVC's)	40%	0 AVC's	2 AVC's
Total	55%	11 AVC's	14 AVC's

Data through 1974-75 only. Sources: AVC interviews; Illinois Area Centers, Fiscal-Statistical Data, AVTE (1976).

TABLE 5.

TYPE OF ECONOMIC AREA AND DATE OPERATIONAL

Date operational	Industrialized central district	Non-industrialized central district	Not centralized	Dense suburb
Before 1970 (17 AVC's) (100 %)	6 AVC's 35%	8 AVC's 47%	2 AVC's 12%	1 AVC 6%
After 1970 (12 AVC's) (100%)	4 AVC's 33%	1 AVC 8%	5 AVC's 42%	2 AVC's 17%
Total (29 AVC's) (100%)	10 AVC's 35%	9 AVC's 31%	7 AVC's 24%	3 AVC's 10%

Source: AVC interview data.

high schools, a tendency running counter to the initial concept of AVC's.

Does this tendency have a negative effect on the accessibility of vocational education to rural students? There are no apparent reasons why it should. Interview information from the AVC's indicates that spaces at the center are allocated in cases of high demand according to the student enrollment of the participating high school, including the larger administrative district high school. Only a few of the programs usually have competitive admissions due to demand for places. Therefore many of the courses should be easily accessible to more students from rural participating schools, unless there are factors inhibiting demand.

Several such factors were cited during interviews. In the absence of special incentives or recruitment efforts, rural enrollments were kept disproportionately low. One obvious factor is travel time. Some rural students might spend half an hour or more on a bus getting to and from their home high school, and an additional half hour or sometimes forty minutes each way to the AVC. The strength of travel time as an inhibitor of demand is not known, because it is mixed in with other factors of student motivation.

Other student motivational factors are difficult to assess. According to interviews, the attitudes of vocational and other teachers, administrators, and counselors fostered a climate at each participating school which had a strong positive or negative effect on the annual rate of AVC applications from that school. AVC administrators claimed to have noted a change in this climate following a change in personnel at the participating school, or a recommendation by an AVTE evaluation team that greater use be made of the AVC. Another motivational factor was school rivalry, wherein athletic or general

competition was escalated, through identification of the AVC with the administrative district high school to which it was often physically attached, to an unwillingness to attend.

By far the most important determinant of the number of students attending cited in interviews was financial -- participating schools cut their AVC tuition budgets when their own operating budgets were threatened by inflation and State funding cutbacks. The responses to this study's questionnaires to participating schools (tabulated in Appendix C) did not identify budget problems as significant restricters of AVC enrollments. However, AVC directors reported conversations with participating high school superintendents where budget constraints were listed as paramount in decisions to restrict AVC enrollments by their students. They also reported such conversations with relatively affluent districts -- those with high assessed valuations whose economies were insulated from economic recession -- and believed that the constraints were the result of the unwillingness of local administrators to increase taxes.

Table 6 indicates that approximately 28% of seniors believed that other students from their home school wanted to go to the AVC but couldn't, and an equal number denied this. (A larger number, 43%, said they didn't know.) There is a slightly greater occurrence of this belief among students from more distant schools (35% of those agreeing came from 10-25 miles away, although they made up only 30% of respondents), and greater denial among students from within 5 miles (the administrative district in most cases). Apparently, outlying school students believe that there is some unmet demand for places at the AVC.

TABLE 6.

SENIORS'
ACCESSIBILITY PERCEPTIONS BY DISTANCE TRAVELED TO AVC

Distance traveled (miles)	Did other students from your school want to go to the AVC?	
	Yes (212; 28%)	No (207; 28%)
0-5 (312;42%)	36%	44%
5-10 (134;18%)	17%	20%
10-25 (226;30%)	35%	26%
More than 25 (79;11%)	12%	9%

(Total: N=751)

Sources: Cross-tabulations of 760 Seniors questionnaire responses.

Responses from participating high schools, on the other hand, indicate a belief that the demand for places is low and not greatly restricted by tuition charges. Table 7 shows that 10% or fewer of the schools believed in the need for more openings in all program areas (except trade and industrial, which was checked by 22%). If lower tuition charges were put into effect (for example through increased State aid), demand would increase slightly in personal and public service, business, and health occupations, according to these respondents. Table 7 would also indicate that participating high schools want AVC's to concentrate on the higher cost trade and industrial programs or to charge differential tuitions by program area. In any case, there is a discrepancy between the estimates of demand for AVC places by participating high schools on the one hand and students and AVC directors on the other.

Services provided to handicapped students by AVC's are still severely limited. Generally, AVC facilities, especially newer ones, have few physical barriers to serving physically handicapped students. All AVC's are aware of the possibilities of remedial and other programs for the disadvantaged. As a rule, however, it was believed that AVC's are not living up to their full potential in these areas. According to the initial concept of AVC's, they would seem ideallly suited to provide the centralized, limited enrollment vocational programs that handicapped and disadvantaged students would need. In the AVC experience, however, there has been little support from participating schools. AVC directors say that high schools wish to try to take care of such students themselves with the help of extra reimbursement from the State. In addition, it was pointed out, AVC programs for the disadvantaged and handicapped would be even more expensive per capita than regular AVC programs, and

TABLE 7.

PARTICIPATING HIGH SCHOOLS' INDICATION

OF NEEDS FOR AVC OPENINGS

Program Area	Number of PHS checking "more students would attend at" Same tuition	Lower tuition
Applied biology, agriculture	17 8%	18 8%
Business, marketing, management	12 6%	19 9%
Industrial-oriented	47 22%	35 16%
Personal, public service	20 9%	28 13%
Health	15 7%	20 9%

Source: Tabulation of 216 Participating High School questionnaire responses.

might increase the tuition charges to all participants. Finally, the added cost of transportation vehicles for physically handicapped students served as a barrier.

* * *

In 1976, approximately 55% of Illinois high school districts were involved in operating or planned AVC's. The map in Figure 1 (p. 3) shows the approximate area served by each center. The goal behind the AVC concept is that all districts in the State should provide their students with opportunities that can be made available through alternative kinds of area vocational education. At present, however, there is a virtual moratorium on new proposals and construction of AVC's, and the search is on for efficient alternate ways of providing these opportunities to unserved geographic areas and to districts within range of AVC's who have chosen not to participate.

B. Goals of facilities and equipment

A stated goal of area vocational education is to share the cost of expensive facilities and equipment among several school districts. Due to the careful accounting for and extensive planning of facilities and equipment purchases, this goal has been achieved in many AVC's. However, in a large number, some facilities and some equipment were taken over by the AVC from an administrative district high school. This situation does not represent an upgrading of opportunity for students from the administrative high school, or for students from participating high schools which may have previously had a minimally equipped vocational program.

Constraints on achievements of facilities goals have been financial.

Usually, administrative districts shouldered the responsibility for raising capital. In some cases tuition charges have included amortization payments on the administrative district's expenditures, but especially in the older AVC's, these have been small payments used for a repair and replacement fund rather than to give equity in modern facilities to the paying districts. Table 5 (p.52) shows the number of AVC's built entirely with funds from the administrative district.

AVTE guidelines require 15 programs in five areas. AVC's have always offered programs where large equipment expenditures have not been necessary, such as child care, drafting, secretarial skills, and cooperative programs. In some cases, a major reason for the offering of these programs is to meet the guidelines, because these offerings may also be found at small high schools. Thus the AVC does not automatically represent a new opportunity in these areas. However, the advantages of sharing the cost of a teacher usually encouraged participating schools to support the programs by sending students.

For a course in data processing, a relatively small AVC with under 500 students will not be able to support the purchase of computer-related equipment, for example, whereas a larger AVC could. The per-capita need for computer-trained graduates might be the same in both regions; even if it varied, it is the State's objective to make the per-capita opportunities equal.

In both kinds of program discussed above -- low-capital and high-capital-- the effect of the State's matching fund purchase policy has led to a distribution of facilities and equipment similar to the distribution of local school district expenditures. (The possible range of State shares is from 40% to 60%, and before 1970 it was 50%; the interviewers found no case where the

State had furnished less than 60% of a facility built after 1970, however.) This similarity has naturally favored the historically advantaged districts in metropolitan suburbs, for example. Since the relative decline in value of a non-vocational education began in the late 1960's, these districts have competed successfully for a larger share of AVC capital funds (Table 4, p.51).

Besides some problems with the distribution of facilities funds, there is also an apparent under-utilization of the facilities that are available. Many AVC's open their buildings to adult education classes after "school" hours; a few offer summer school or late-afternoon classes. Expensive equipment should be used intensively, especially if it is likely to become obsolete before it wears out. Therefore such programs should be opened to as many different users as possible, as long as the training received is valuable in securing employment.

This value should be calculated and compared to the cost of providing the training opportunities. Unfortunately, AVC administrators know very little for sure of what the costs of additional operations are, and they are generally restricted by State laws and guidelines from sharing all of the costs among various programs unless exact costs can be demonstrated. For example, the advantage to a local community's adult education program which accrues from having the AVC located in that community is not paid back to the AVC in such a way as to lower the tuition costs to more distant participating districts whose adults do not use the opportunity because they do not wish to drive that far at night. Nor, it is believed by most directors, are the costs of equipment repair and replacement and provision for new facilities borne adequately by the payments received for use of the building by community college programs. According to information from interviews,

the rental payments in such cases cover only the direct costs of operation.

On the other hand, the interviewer was given examples of how certain expenses were allocated by design between the AVC and the administrative district in order to minimize the tuition chargebacks to other participants. These expenses were utilities, administrative services, and other expenses where exact allocation is usually estimated by accountants.

Because of these difficulties in recovering costs, and because of the legal requirement that AVC accounts be kept strictly separate from other accounts, it is sometimes not "worth it" to make an effort to increase the utilization of AVC facilities. The lack of regular cost data and reimbursement formulae which would allow the fully shared use of facilities is a problem.

Turning now to successful examples of increased utilization of AVC facilities, we discuss CETA classes, contracted programs, cooperative second-year programs, increases in the number of sessions, and uses by non-AVC high school programs.

Two AVC's reported successful arrangements with CETA sponsors (the regional agencies expending funds for training under the Federal Comprehensive Employment and Training Act) and had integrated CETA contract students into regular AVC classes. Other AVC's expressed interest in future CETA arrangements, because it was widely believed by those familiar with the arrangements that the payments by CETA covered both the direct and indirect costs of the students. Several AVC directors sat on the local CETA advisory councils in their areas. The board of control of one AVC, however, had rejected a CETA program for juvenile offenders from a nearby larger city because of anticipated

discipline problems. Only five of twenty-one CETA sponsors responded to a questionnaire about their plans for working with AVC's (see Appendix C). This response may indicate a lack of knowledge or concern for the facilities offered by AVC's. The five respondents all expressed plans for use of AVC facilities, but indicated that the facilities presently available to them appear to be sufficient (these included community colleges and employer training programs for the most part).

The contracting of programs to private providers of vocational training was often pointed out during interviews as a way of avoiding duplication of facilities and hence possible under-utilization. Six AVC's contract for cosmetology programs; generally, these AVC's are located in cities with more than 30,000 people, which are likely to have at least one beauty school. Most of the contracts have been in force for several years and have proved satisfactory to the AVC administration and its students, although respondents cited examples of problems resulting from a change in ownership of the schools or discipline problems. Other contracted programs are single examples of a barber program and a floriculture program. One AVC was unable to persuade a local automobile dealer to contract with the AVC to train auto body repairmen in a recently expanded facility; the objections of the shop owner were that a normal class size of twelve students would be in the way and cause insurance problems.

Cooperative second-year programs, where the student is placed during his senior year in a cooperative job directly relevant to his 11th grade training at the AVC, were also cited as a way of avoiding under-utilization of facilities. For example, second-year welding enrollments were often significantly

lower than in the first year of the program, because both 11th and 12th graders enrolled in the first year and graduation and dropouts narrowed the second-year class. A first-year class makes more complete use of a given welding facility, and the more second-year students who can be placed with employer trining programs the more space is available for first-year classes. However, it was noted in the interviews that ideal placements were rare, and the narrowness of some cooperative jobs sometimes represented a compromise with the goals of diversity of training.

Another potential problem in the administration of cooperative programs was identified in interviews. In some areas of the State, it may be important to have a regional agency, such as the AVC, administer cooperative programs, especially those requiring skills on expensive equipment. In other areas, it is advantageous from the student's point of view to have the more local agency-- a home high school-- administer the cooperative job, because local contacts may be needed to obtain it.

One example of such a problem was cited in interviews: an AVC in a central town encountered difficulties in placing health occupations students from participating high schools, because the few cooperative jobs at hospitals were all in the administrative district town and the AVC students from that town took priority in placement because of personal contacts.

A related problem occurred when it was believed that AVC participating high schools chose not to send a student for his second year at the AVC but gave him or her a cooperative job locally, which, because of the predominantly agricultural economy of the participating school's district, did not amplify the industrial training which the student had received at the AVC.

A final example of the regional-local planning process which AVC goals attempt to improve is the efficient allocation of capital purchases. Although the original concept of AVC's implied contributions according to ability to pay from participating districts, in practice many AVC's, including some built from the ground up -- i.e. not using previously constructed space in a central high school -- were funded entirely by the administrative district. The problems resulting from this situation have already been discussed -- a lack of commitment by participating schools, a lack of influence on programming decisions -- but it should be noted that many AVC's, especially older ones, have needs for the replacement, renewal, or expansion of equipment. In these cases, an efficient regional allocation could be made by re-negotiating joint agreements to share the cost according to ability to pay.

There are also situations where it is possible that some AVC's have overreached their equipment goals. In these cases, the AVC joint agreement combined large, and relatively wealthy, and relatively committed (to education) districts to raise a large local matching fund. This large fund was able to draw large construction funds from the State to enable the building of superior facilities. Thus in this situation, the AVC concept of "pinnacle" facilities for smaller, less wealthy districts was carried to a further height, and a pinnacle facility for larger districts, each of which on its own might supply the services offered by a moderately sized AVC, could be built. The competition for limited construction funds, as laws and guidelines now stand, would be won by the larger AVC, reflecting social and political realities: the larger districts have more influence and cohesiveness.

Information from interviews suggested that the best way to deal with all the aspects of efficient capital funds allocation was jointly, with a plan that covered the entire geography of the State and took into account the economic and social differences among school districts. It was suggested that this plan be student-oriented and that it be linked automatically to population and economic changes.

In the area of facilities and equipment planning, the plan would designate equivalent expenditures per student throughout the State. Present and future public and private facilities would be located centrally in regions of convenient travel time, and the cost to the distant student of transportation would be equalized, by direct reimbursement and by additional guidance and placement services. The goal of the plan would be to increase the accessibility of vocational education facilities to all students in the State. As noted, AVC's have been an important step towards that goal, and their positive achievements should be carried forward and duplicated in areas where alternatives are chosen.

C. Goals of administration, guidance, and placement services

In the AVC concept, the AVC administration provides a regional outlook on vocational education that balances the concerns of large and small towns, industrial and farming economies, and highly skilled and less skilled labor market needs. The guidance services represent a regional outlook on the labor market and postsecondary educational opportunities, and are the resources for local school counselors who encounter aptitudes and/or ambitions that cannot be satisfied in jobs known to the counselor or the student personally.

The placement services must be regional also. They must reflect intense awareness of skill needs because the AVC graduate is theoretically further along an employer's career ladder than other high school graduates. All of these efforts -- administration, guidance, and placement -- are related tasks in the present organization of AVC's, and are conducted by the administrative staff and the teachers.

* * *

How has the goal of a regional outlook on administration been achieved? There are three opportunities for each AVC to select administrators with such an outlook, and other opportunities to incorporate such an outlook in their financial policies.

For each AVC, there is a board of control, an administrative staff, and advisory council(s). Boards of control may consist of district or educational service region superintendents or lay board members from participating districts. Their powers vis-a-vis the administrative district may vary, from identical (where the boards are the same) to independent, where the AVC board is distinct from all others, meets often, and has more than advisory power.

The regional outlook of the board of control is improved, as suggested in interviews, if the members come from all the participating districts; if the members are lay school board members; if the administrative district is regional, such as an Educational Service Region (ESR), or a relatively small participating district (which is not seen by others as likely to influence enrollments and programming unduly). These regionalizing influences are discussed in turn in the following paragraphs.

It is believed by commenting respondents that the inclusion of all participating districts in the board of control is helpful to a regional outlook, as the deliberations of the board enjoy the information and concerns of all communities. One possible difficulty was suggested, that the influence of smaller participating schools might be too great relative to the larger ones, to the detriment of the interest of the majority of students. It was believed, however, that the articles of the joint agreement could assign voting rights in a method satisfactory to all.

The regional outlook of the board of control is also enhanced by the inclusion of lay members. Respondents cited situations where local district superintendents were faced with conflicts of responsibility if they sat on AVC boards. A superintendent's responsibility to his local district might include facing requests from teachers, parents, and students for local expenditures that would be incompatible with support of the AVC and regional manpower needs. Although a lay board member would be aware of the same conflict, he would not be held administratively responsible in his own district.

Finally, an important guarantee of a regional outlook by the board of control is a regional administrative district or, in a few cases, a relatively small local administrative district. Three operating centers out of 29 and three planned AVC's out of 7 are administered by ESR's. One operating and one planned AVC are administered by districts which are not the largest town in the agreement. In addition, it should be mentioned that with the continuing consolidation of school districts across the State, some administrative districts formerly representing only one town now include several. These kinds of boards do not have to fear administrative veto from a

large-enrollment district; and no special status is granted to one or another town -- an important consideration in the atmosphere of traditional rivalry that is said to exist.

The second important component of AVC administration, after the board of control, is the local advisory council, which, in the AVC concept, is made up of knowledgeable employers and labor union representatives who meet regularly to recommend programs, equipment purchases, and curriculum. The advisory councils (AC's) were cited for being extremely helpful when it came to making decisions on equipment purchases. It was discovered in interviews and from employer and labor organization questionnaires (tabulated in Appendix C) that the goals of regular meetings and significant influence were rarely met, however. The suggested reasons for these problems were the overall lack of interest by potential and actual AC members in the AVC programs, and lack of interest in determining specific alternatives for curriculum decisions. It was believed that the lack of interest, particularly prevalent in geographical areas where the labor market was diffuse and unconcentrated, stemmed partly from the inability of AC members to see the results of their advice. A small company might be interested in only one or two AVC graduates every five years, for example. Other problems might be the possibility that their advice would help local competitors or, simply, that too much of their time would be necessary to do a good job planning curriculum -- the budgeted training time for small employers was used up on their own employees.

The AVC's which had reached their goals for the use of advisory councils identified several contributing factors. First, that "steady" (i.e. regularly hard-working) AC members commonly came from large employers or unions;

some were even given release time to serve. Less often, individuals from smaller firms would be valuable members, but this was a matter of personal concern on their part. Second, the regional nature of the advice -- a goal of the AC system within AVC's -- was directly proportional to the size of the labor market area from which the employees came. The more occupations and the more distant the geographical area which the firm canvasses for employees, the more likely it was to supply advisory council members. In the cases where service on an AC was considered good public relations, the breadth of the sales market was also a factor.

The implications of these conclusions are that special efforts may be needed by some AVC's to insure the commitment and regional nature of advisory councils. AVC's serving more rural areas have responded by forming joint advisory councils with community college districts, or by forming a single combined advisory council for all programs with attempts to rotate membership among different occupational areas, or by encouraging teachers to request advice on an ad hoc basis from employers. However, some respondents said that the AC goal had not been achieved for all AVC's, and that further efforts and ideas were needed. All respondents agreed that the goal was important and could not be achieved more easily another way.

The third administrative component, and the most important in terms of its effect on AVC goals, is the administrative staff: the AVC director, the guidance coordinator, and their assistants at larger AVC's. Illinois AVC directors are, as a group, qualified vocational educators by virtue of previous teaching and administrative experience. Most displayed, during interviews, a regional grasp of the economic and demographic nature of their

constituencies. However, many must act under a tension caused by potentially conflicting demands on their decisions.

For example, in the AVC concept, they are expected to act regionally, choosing programs, identifying proficiency requirements, hiring teachers, and establishing graduation and admissions standards; for these things, they are responsible to the State and AVTE guidelines. But in many AVC agreements, they have no direct contact with participating high school administrators or boards, and thus have no institutionalized way to either present or enlist local support for their decisions. In times of declining enrollments at participating schools coupled with inflation's pressure on school district budgets, they are not welcome to suggest increased local funds for area vocational education: they are considered part of the problem -- their teachers ought to face layoffs and their budgets, cutbacks. Again, because of the nature of AVC agreements, linking AVC's to a particular school district through teacher contracts, facilities location, and boards of control, AVC's are unable to disassociate themselves from the taxpayer's jaundiced view of rising educational costs and nebulous benefits.

The importance of the Director's influence, however, should not be minimized. For some, the tensions described above have been challenges successfully met. Since the beginning of AVC's in Illinois in 1966, the system has often attracted independent-minded persons who saw the importance of regionally based vocational education in bright contrast to local-district efforts. The history of many AVC's is linked with that of the first director, whose energy was a significant factor in bringing the participating schools together and in accomplishing the planning and approval processes required by AVTE.

(AVTE consultants were also often cited as important contributors during the early stages.) In other cases, the energy was supplied by a local superintendent, most often of the AVC administrative district. In the latter cases, directors were often chosen from among the vocational teachers or directors of the administrative district high school. A sense of, and experience in, regional vision should be considered an asset.

* * *

Goals for AVC guidance services are:

-- to counsel all students in participating districts as to who would benefit from AVC attendance;

-- to counsel AVC students on the best use of the talents, skills, and interests they have demonstrated;

-- to assist in program planning by careful measurement of student demand and of graduates' subsequent labor-market experience.

The amount of counseling given to participating high school students varies widely from AVC to AVC, and, within AVC districts, from high school to high school. The AVC guidance coordinator (a position mandated by AVTE guidelines) generally sets as his or her goal the presentation of AVC opportunities to ninth and/or tenth graders, and the provision of resource information to home school counselors (who still retain half, in some cases by custom more than half, of the responsibility for the student's guidance). According to interviews, this goal is best met when:

-- the AVC counselor is given repeated access to the attention of ninth and tenth graders, both as a group, for the showing of films or slide shows and the verbal description of AVC opportunities, and individually, for AVC tours by and conferences with students who express interest;

-- the vocational teachers at the participating school, who are responsible for teaching vocational orientation and in some cases more advanced courses, recommend the AVC to students who show

promise and interest;

-- provision is made for the administration of vocational aptitude and interest tests to all students, and the results made available to the AVC guidance coordinator.

These favorable conditions are not always present; in such cases, admitted coordinators, their goals had not been achieved. In most cases where guidance coordinators believed that they had not had enough access to ninth and tenth graders, the reason cited was a restriction imposed by the participating school on the amount of time that the coordinator or his or her staff could spend with the students. In other cases, the extent of disciplinary, placement, and recordkeeping duties was said to be so great as to occupy much of the coordinator's time, leaving little for school visits and conferences.

It was observed, from interviews and participating high school questionnaires, that the administrative arrangements for AVC selection and discipline were left up to officials of the participating school. Section A of this chapter reported on selection procedures. As for discipline, most AVC's reported formal or informal agreements with participating high school principals that the latter would be responsible for assigning and enforcing penalties for rule infractions. AVC administrators believed that this procedure would relieve them of a burden, and that the participating high school, because of its presumably closer relationship with the student's parents and background, would be more effective. The only demurrer was voiced in the case of a student who, while a discipline "problem" at his home school, had "settled down" whenever he arrived at the AVC -- but one of the penalties automatically imposed at his home school was absence from the AVC.

Overall, the amount of time devoted to disciplinary matters by AVC staff was minimized, but, because of the relatively large enrollment -- a schoolful two or three times a day -- the time was not inconsiderable.

* * *

Goals for AVC placement services, broadly stated, are to offer every graduate an opportunity to take a job or further training that is consistent with the skills he or she has acquired -- one whose starting wage (or credit level if additional training is chosen) reflects the increased value of skills learned at the AVC. Data from interviews and questionnaires indicates that this goal is achieved for between one half and two thirds of AVC graduates, but the AVC placement effort can take only part of the credit.

Students, employers, labor unions, and AVC officials and teachers themselves said that the primary source of placements was informal contact and effort by the student (see questionnaire tabulations in Appendix C). Jobs were found over the summers, part-time after school, and through friends and relatives; training-related jobs in the Armed Forces were identified by the students and a recruiter; and training-related further education was also selected by other than formal AVC efforts. AVC officials indicated satisfaction with this situation, because it gave the student experience in how jobs were actually found.

As for the third that are not successfully placed according to the above goal, the most important obstacle cited by respondents was the inability of high school graduates to meet the age, experience, and maturity standards of employers. Placement efforts for this group of students concentrated

on finding them any job once the unavailability of suitable jobs or training opportunities was determined.

Respondents believed that the present achievements of the AVC placement efforts were satisfactory on the whole. They suggested that AVC vocational training is "good for" students even though they may not find a related job, because of the general values it teaches, of competence and reliability. All agreed, however, that a "borderline" group of graduates -- those not finding related jobs through contacts but competent and interested enough to look hard for related jobs -- could be aided by expanded placement efforts, especially regionally coordinated ones. AVTE's six Pilot Exemplary Programs contracted to groups of high schools, community colleges, and AVC's were cited by their participants as moves in the right direction. The important factor in making these pilot programs valuable, it was believed, was the extra funding for personnel, including a placement director, secretarial help, and funds for printing and mailing.

Finally, it was also believed that the follow-up effort presently conducted according to AVTE guidelines and consisting of a postcard questionnaire to graduates in the Fall after graduation was good but insufficient; again, expansion would require the allocation of additional funds. One example of additional follow-up expenditure occurred at one AVC which circulated the follow-up responses to all graduates, and had them available, in booklet form, for students to look at. It was believed that this effort resulted in good publicity for the AVC and an improved response rate to follow-up surveys.

D. Goals for program offerings

It is the AVC's goal to offer training that will fit a high school graduate to enter the world of work. Further definition of the AVC goal, according to interviews, relies partly on contrasts with other high school systems: AVC's should offer what high schools do not. All high schools have the same broadly stated goal of educating a graduate to take a productive place in society. In different areas of the State (and of the nation) the public high school system was seen as having failed to attain this goal for certain groups of students and for certain occupational areas. Therefore, alternative high school programs were established; the AVC is but one example.

The program choices of AVC planners often reflected what was not available elsewhere, rather than a uniform set of competency goals. To show why these "negative" choices were made, let us hypothetically compare two high schools just before their participation in the planning for an AVC.

High school A, in a large town, has owned some welding equipment, and gives two credits of instruction to twelve students each year. The other high school, B, in a smaller town, (with, nevertheless, the same per capita need for welders), has only a woodworking shop. School A perceives the programming needs of the AVC as a second-year welding course with six openings for its best students. B will want a first year of metal shop and a second year of beginning welding, perhaps. If they are to join an AVC agreement, their needs must be reconciled during facilities planning, equipment purchase, and teacher hiring phases, and the programs must be scheduled to

serve A, B, and other participants.

If, however, one or several high schools like A dominate a joint agreement, the AVC may have a preponderance of advanced welding equipment, a highly trained teacher, and a good reputation among local employers. If at another AVC type B schools predominate, welding equipment might be elementary, the teacher might be responsible for mechanical drafting as well, and employers will find the graduates may need further training before attaining the welding skills they require.

Because of many situations like this across the State, the program achievements of AVC's vary widely. However, also because of these situations, there is continuous pressure on AVC's to "upgrade" their offerings -- to provide more complex skill levels. This pressure occurs when a participating school decides to upgrade the vocational training offered in its own programs -- a decision which is supported by the availability of State funds for equipment and operations. The participating school is then likely, however, to decrease its enrollments at the AVC, because it is able to say to its students that the advantages of going to the AVC have been reduced below the corresponding extra cost. The response should be -- and directors agree -- to upgrade their own programs to attract these students for a second-year advanced program. However, the immediate result of an enrollment drop is an increase in the tuition rate, which, aside from having a negative effect on "marginal" enrollments from other participating high schools, will make it more difficult for the AVC to raise the new capital which it must have to upgrade its program.

This dilemma could be solved if: (1) the State automatically raised the

equipment and operating reimbursement of the AVC whenever it raised reimbursements to participating high schools or other joint agreements, or (2) if regional planning was mandated to avoid the temporary enrollment drop that may tend to occur at AVC's. (In the latter solution, a participating high school planning to upgrade its offerings would do so in timed concert with the AVC, to insure continued benefit to its students.) Some combination of the two solutions is also possible.

E. Goals for articulation of programs

Goals for the articulation of programs vary throughout the State and provide for constant re-evaluation and change, as do the goals for programs themselves. In the ideal, AVC programs should mesh smoothly with the skills brought by tenth graders from participating high schools, provide one or two years of productive skill development, and mesh smoothly with occupational entry requirements, employer training programs, and community college offerings. According to data from interviews and questionnaires, this ideal is not completely attainable statewide because of widely varying local situations, and it is not attainable for individual AVC districts because of conflicting goals among other training providers. In this section, we will examine the problems of this very complex issue from the AVC's point of view and identify the workable steps that some AVC's have taken or been a part of.

It will be helpful in the analysis to separate the "entry-articulation" issue -- that between participating or potentially participating high schools and the AVC -- from the "graduate-articulation" issue. It must be noted, however, that all long-range recommendations must take into account

the need for "occupational awareness" and "career education" that exists from elementary school through retirement, and which should be efficiently fostered by the public education system.

As has been pointed out in two of the foregoing sections of this chapter, those on programs and on facilities and equipment, the central articulation problem between participating high schools and AVC's is a wide variation in the level of skill training, labor market information, and admissions standards. These variations make each class a challenge to the teacher, to provide interesting and understandable instruction to all. Recommendations have been made elsewhere on improving labor market information and admissions standards, but improving the articulation of specific skills will take additional effort.

This effort has been begun by some AVC's who have established first and second year classes with specific competencies spelled out. Students can practice competencies befitting their previous training, and take first or second year courses or cooperative jobs according to their individual advancement. In some AVC's, the decision has been made to encourage students to switch programs between years or during the year (in contrast to previous avoidance of this option), in spite of the administrative problems entailed. Larger AVC's, especially those with three sessions and many sections, are able to offer such diversity of opportunity more often than smaller AVC's.

The problem of the articulation of courses to benefit graduates is more influenced by external differences, because the opportunities for work or further training are usually broader and less easily pigeonholed than the skills provided by participating high schools. Regional differences are

very strong. In concentrated labor-market areas, large employers -- who are usually the most attractive in terms of wages and benefits -- are also more likely to have their own training programs, and are therefore less concerned about the specific advanced competencies, beyond basic skills, of AVC graduates. Likewise, community colleges in such areas are more likely to have made a larger investment in occupational education, because of traditional concern and the availability of local capital. (In some areas, however, community colleges have been concerned with improving "academic" offerings, a legacy of the 1960's concern for a "college education:" this type occurs in both the concentrated suburbs and sparsely populated rural areas.)

Because of these variations, AVC's throughout the State have also varied in their responses to the recognized need for articulation of their programs with graduates' opportunities. Some have been able to consider themselves the "determining" factor in their region, because small employers and small community colleges have been encouraged by circumstances to tailor their own training offerings to the AVC's. Others have energetically responded to the need for written agreements specifically outlining the procedures for transferring credits for specific and general proficiencies from the AVC to the employer or community college. However, the consensus throughout the State, from interviews and questionnaires, is that formal procedures need to be strengthened and encouraged by the State, because the vocational education system, as it grows, is becoming more complex, and threatens to overwhelm the student's interest in a straightforward non-repetitive training program.

The importance of formal, published agreements on the transfer of credits for specific competencies cannot be over-stressed, according to many respondents.

In the first instance, these agreements may prevent wasteful duplication of student effort and community funds; in the second, the publication of the agreements will equip the student and his guidance counselor with the knowledge to make a rational choice among opportunities, and therefore encourage training administrators to adjust themselves to the students' needs more closely.

It is instructive to examine the agreements made between AVC's and community colleges for the granting of credit by the latter for skills learned at the former. According to interviews and questionnaires, the number and scope of these agreements are inadequate, but slowly improving. It was believed that both groups should be willing to compromise on some of the problems, especially skill measurement and "residency" requirements, and that there was a role for the State in mandating minimum standards for credit transfer. A description of the single most detailed formal agreement, between a large AVC and a community college that had a largely coterminous service area, will show where such agreements are and where they have still to go.

Figure 4 displays the direct credit equivalents and opportunities for achievement of credits through proficiency examinations. There is a condition for the direct granting of credits; credits are not entered on a student's transcript until he or she has completed a minimum of 12 semester hours of courses at the community college. The reasons for this condition are not explained in the brochure handed to students.

In a cover letter to the brochure, the community college administrator says that the agreement (dated November, 1975) represents the outcome of

FIGURE 4. SAMPLE CREDIT AND PROFICIENCY AGREEMENT

AVC Program	Community College Program	Title of Course Credited	Direct Credit (C) or Proficiency Exam (P)	Number of semester hours credit
Ornamental Horticulture	Ornamental Horticulture	Prin. of Ornamental Horticulture	C	3
		Plant Propagation	P	3
Office Skills & Procedures	Secretarial Science	Beginning Typing	C	3
		Intermediate Typing	P	1 or 3
		Advanced Typing	P	3
		Beginning Shorthand	P	1 or 3
		Intermediate Shorthand	P	1 or 3
		Business Machines I	P	1,2, or 3
		Keypunch	P	1
		Transcription	P	3
Health Occupations	Licensed Practical Nursing	Intro. to Practical Nursing	C	4
Child Care	Human Services	Human Services Seminar I and II	C	2
		Prin. of Early Childhood Ed.	P	3
Food Service	Food Services	Intro. to Food Service Occ.	C	2
		Food Preparation & Service I	P	3
Cosmetology	Cosmetology	Cosmetology I	C	8
Auto	Automotive Technology	Auto Service & Repair I	C	4
		Auto Elect. Theory	P	2
		Carburetion	P	2
		Internal Comb. Eng.	P	4
Building Trades	Construction Technology	Machine & Tool Orientation	C	2
		Arch. Draw. Inter.	P	3
		Residential Const.	P	4
		Util. and Service	P	4
Electronics	Electronics Technology	DC Fundamentals	C	3
		Fund. of Elect.	C	3
		Electrical Wiring	P	3
		DC Circuits	P	4
		Transistor Elect.	P	4
Industrial Electricity	Indust. Elect. Maintenance	Fund. of Elect (See Electronics & Mech. Des.)	C (P)	3
Drafting	Mechanical Design	Basic Tech. Draw.	C	4
		Machining & Manufacturing Proc.	C	4
		Technical Math I and II	P	4 each
		Slide Rule	P	1
Welding	Welding	Welding I	C	4
		Blueprint Reading & Layout	P	3

several years of discussions and of exchanged visits by AVC and CC teachers to evaluate each other's programs. It also says that the agreement will be revised annually.

This agreement was the most detailed, the most extensive, and, if it was in fact circulated to the AVC students, the most publicly available of the agreements identified during the study. (Similar close relationships are expected to be the rule at two new AVC's built adjacent to and in close coordination with community colleges. One of these opened last year and another is due to open next year.) However, several factors can be cited which would have led us to expect that this advanced articulation agreement would have flourished in this particular AVC district. These factors were:

-- the long existence of the AVC, which was one of the oldest in the State, giving it a "lead time" in developing advanced programs and community support for articulation agreements;

-- the large size of the AVC, which allowed it to operate a broad range of advanced second-year courses which require specialized equipment and skilled students;

-- the relative geographical similarity of their areas, which lessens contact and consultation problems.

Other AVC's and community colleges without these "advantages" will have to devote additional efforts to the achievement of rational articulation. Again, there is a role for the State in leadership and funding incentives to establish such agreements.

F. Goals of meeting State manpower needs

AVC's and all vocational training programs have as one of their goals the enhancement of the State's economy: the efficient delivery of training skills will increase the productivity, the payroll, and the standard of

living of the State's citizens. This is one of the main reasons why the State has been willing to share the burden of area vocational education. Although decades of experience in developing manpower-needs statistics has enabled planners to have a broad view, with considerable predictive value, of future needs, there are special problems relating to the training of secondary students which have not yet been solved. Progress is being made, however, and with increasing use of available statistics and with the development of new information, AVC's will be able to perceive their relationships to the State's manpower needs more accurately.

The problems in relating manpower needs to AVC enrollments and competency programming can be summarized as the psychic and chronological "distance" between high school students and the "labor market" -- the latter term referring to the whole range of skills and persons that make up the economy and which, being so large, moves in statistically predictable fashion. The psychic distance from the labor market refers to the data from interviews and questionnaires that indicates a need for options and alternatives among high school students; they do not usually indicate a strong and specific ambition for certain training leading to certain jobs. (The students who do have this ambition -- ones who feel well informed about a particular occupation and who have an opportunity to enter it through personal contacts -- make "good" students.) The chronological distance refers to the number of years and life changes (marriage, leaving home, etc.) that usually intervene before a 18-year-old "settles" enough to become a reliable labor market statistic. The analytical techniques needed to bridge these distances -- extensive longitudinal studies, assessment of motivation, etc. -- are under evaluation, but results are not usable by AVC planners.

Such intuitive techniques can be improved, and labor market needs more closely approached, by increasing the opportunities of teachers and students to have first-hand contact with actual labor-market situations: job searches, layoffs, and actual job conditions. This increase of opportunities is a goal of the statewide "career education" effort. Data from interviews and questionnaires indicated that the effects of this effort have not been felt specifically at AVC's, and that career education planning has not been refined enough to indicate special goals and funds for AVC's.

G. Goals for planning regional vocational education

Planning for regional vocational education is an integral part of the State's role, and it is important that the responsible officials reflect the goals of the whole State. Planners must consider that Area Vocational Centers are not the final answer to the aspirations of the people of the State. Let us consider some of the opinions expressed in the questionnaire responses of this study, recalling that the sample is statewide and that the opinions of individual centers are not known.*

-- Employers expressed restrained appreciation of public vocational education in general, and slightly greater appreciation of AVC's. However, their interest in the goals of vocational education apparently could be increased by more information.

-- Comprehensive high schools, while not asked to evaluate AVC's, believed that their own vocational programs were strong. Seven out of 18 respondents were using joint agreements with other districts. There is apparently some potential in this area. These high schools are also interested in expanding trade and industrial occupation programs.

*Summaries are drawn from the questionnaire response tabulations in Appendix C.

-- Community colleges, although largely lacking the information necessary to evaluate AVC's, have a positive opinion of their contribution to vocational education. Many CC's indicated plans to expand vocational offerings. There is potential for increased State efforts to encourage administrative contact and articulation agreements.

-- Labor organizations responded positively regarding their experiences with AVC's. Clearly, however, there is potential for greater contact, in geographical areas where labor unions have large memberships.

-- In-school seniors had a complicated response to their AVC experience.

1. Table 8 shows that 37% of the seniors who knew a last year's graduate would like a job similar to that person's, against 12% who wouldn't. This reflects a positive opinion of AVC training, and is unaffected by accessibility perceptions.

2. Table 9 shows that 64% of the seniors planning to go to school next year intended to study a similar program. Also, 51% intended to travel more than 25 miles to school. This reflects a positive evaluation of AVC training and of the effort of traveling to school.

3. Table 9 also shows that 69% of the seniors planning to work want a job like the one they studied at the AVC. Eighteen percent wanted a different job. There is obviously room for an increase in the proportion of favorable responses here. Again, 51% of those who don't know where they will work say they will look in cities 25 miles or more away.

4. Table 9 as a whole shows that the distance traveled to the AVC by seniors has only a tenuous relationship to their plans. There are fewer "don't know" responses from students from more than five miles away. Also, more distant students are more likely to expect to travel farther to school or work, but this result is probably simply related to the geographical location of their home towns.

On the whole, the seniors seemed to value their AVC experience. At the same time, there are areas where planners can improve the confidence of many in the value of their AVC learning.

-- Graduates' responses reflect less favorably on their AVC experience. (In view of the 36% response rate, there cannot be a great deal of confidence in the exact percentages, but there is no reason to expect a bias against AVC's.) See Tables 10 and 11.

1. Only 50% of the graduates who were working believed that they had learned the job at the AVC. However, this group was more likely to plan to keep their jobs for a while and less likely to plan to learn another job at school. This response indicates a consistently positive attitude among this group.

2. Of the graduates reporting that they are attending school in the Spring of 1976, 63% had studied similar skills at the AVC; this group was also more likely to have moved from home, and to a greater

TABLE 8.

FRIENDS' ACHIEVEMENTS AND ACCESSIBILITY PERCEPTIONS

Did other students from your school want to go to the AVC?	I know persons who graduated from the AVC last year		For those who checked yes, what happened to them?			
	Yes	No	They got jobs I would like	They got jobs I wouldn't like	They went to school	Don't know
	(520; 71%)	(213; 29%)	(191; 37%)	(63; 12%)	(120; 23%)	(152; 29%)
Yes (210; 29%)	28%	31%	29%	32%	24%	29%
No (202; 28%)	28%	26%	29%	30%	29%	26%
(Don't Know: 322;44%)						
(Total: N=734)						

Source: Cross-tabulation of 760 Seniors questionnaire responses.

TABLE 9.

SENIORS'

PLANS FOR NEXT YEAR BY DISTANCE TRAVELED TO AVC

Distance traveled (miles)	Plans			School					
	School	Work	Don't Know	Program		Distance (miles)			
				Same as at AVC	Different from AVC	0-5	5-25	25-50	More than 50
	(292; 39%)	(440; 58%)	(49; 7%)	(220; 64%)	(101; 30%)	(29; 10%)	(113; 39%)	(55; 19%)	(93; 32%)
0 to 5 (317;42%)	46%	38%	51%	41%	53%	72%	43%	35%	43%
5 to 10 (135;18%)	15%	20%	14%	18%	15%	10%	19%	13%	16%
10 to 25 (228;30%)	30%	31%	22%	31%	27%	17%	30%	35%	29%
More than 25 (79;10%)	10%	11%	12%	11%	6%	0%	8%	18%	12%

(Total: N=759)

Source: Cross-tabulation of 760 Seniors questionnaire responses.

TABLE 9 (CONT.)

	School (cont.)					Work				
	How did you find out about this school?					Kind of job wanted			Knows next year's job	
	Friends	Home school counselor	AVC counselor	AVC teacher	Another way	Like AVC program	Different	Doesn't matter	Not sure	Lists a job
	(205; 27%)	(161; 21%)	(43; 6%)	(102; 13%)	(96; 13%)	(409; 69%)	(107; 18%)	(78; 13%)	(356; 64%)	(200; 36%)
0-5 (317;42%)	42%	39%	47%	45%	46%	40%	49%	39%	43%	40%
5-10 (135;18%)	20%	21%	19%	18%	17%	19%	9%	21%	18%	18%
10-25 (228;30%)	29%	32%	28%	28%	26%	31%	34%	27%	30%	31%
More than 25 (79;10%)	9%	9%	7%	10%	12%	10%	8%	14%	10%	13%

(Total: N=759)

TABLE 9 (CONT.)

Work (cont.)

	Knows location of next year's job		Of those who listed a city, how many will go:				Of those who said "don't know", how far will they look?			
	Doesn't know (357; 60%)	Gives city (230; 39%)	0-5 miles (106; 45%)	5-25 miles (88; 37%)	25-50 miles (17; 7%)	More than 50 miles (27; 11%)	0-5 miles (37; 10%)	5-25 miles (136; 38%)	25-50 miles (85; 24%)	More than 50 miles (98; 27%)
0-5 (243;41%)	42%	40%	47%	50%	29%	48%	57%	43%	29%	42%
5-10 (105;18%)	17%	18%	16%	15%	29%	22%	19%	19%	15%	20%
10-25 (63;31%)	31%	30%	25%	42%	12%	26%	19%	30%	40%	29%
More than 25 (63;11%)	10%	13%	12%	14%	29%	4%	5%	7%	15%	9%

(Total: N=592)

TABLE 9 (CONT.)

Work (cont.)

Job information source

	Friends	Home school counselor	AVC coun-selor	AVC teacher	Another way
	(358; 47%)	(94; 12%)	(44; 6%)	(166; 22%)	(213; 28%)
0-5 (317;42%)	41%	38%	48%	45%	40%
5-10 (135;18%)	18%	21%	25%	16%	16%
10-25 (228;30%	30%	32%	25%	28%	32%
More than 25 (79;10%)	11%	9%	2%	12%	13%

(Total: N=759)

TABLE 10.

WORKING GRADUATES' JOB CHARACTERISTICS

	Moved away to get job		Plan to keep job		Plan to learn another job at school	
	Yes	No	Yes	No	Yes	No
	(20; 10%)	(183; 90%)	(115; 58%)	(83; 42%)	(71; 39%)	(109; 60%)
Learned job at AVC (101; 50%)	65%	48%	60%	36%	35%	56%
Didn't learn job at AVC (102; 50%)	35%	52%	39%	64%	65%	44%

(Total: 203)

Source: Cross-tabulation of 264 Graduates questionnaire responses.

TABLE 11.

GRADUATES IN SCHOOL - PROGRAM CHARACTERISTICS

	Moved away		Distance from home to school (miles)		
	Yes	No	0-5	5-25	Greater than 25
	(41; 40%)	(62; 60%)	(29; 30%)	(31; 32%)	(38; 39%)
Studied for similar skills at AVC (65; 63%)	76%	55%	55%	55%	71%
Didn't study similar program at AVC (38; 37%)	24%	45%	45%	45%	29%

(Total: 103)

Source: Cross-tabulation of 264 Graduates questionnaire responses.

distance, than the group who had changed studies. (The latter group presumably includes persons taking non-vocational postsecondary programs--for example, the 22 students enrolled in a four-year college.) Again, the response indicates a general appreciation of AVC training, greater among those who went to school than those working.

3. Finally, it is of interest to compare graduates' experiences with seniors' expectations. The proportion of graduates in school, apprenticeship, or the armed forces is 37%, close to the 38% of seniors with such plans. 64% of these planned to study similar programs, and 63% did. Although only 58% of seniors said they planned to work next year, 78% answered one or more questions about next year's work plans; 75% of graduates said they were working. 69% of the seniors wanted a job like the one they were learning, but this objective was achieved by only 50% of graduates.

-- Participating high schools expressed satisfaction with AVC's on all points raised in the questionnaire (see Table 12), as at least 60% called the present AVC features "satisfactory", the highest rating. Of interest to planners, however, is the response of 83% that joint agreements other than with the AVC would be necessary in the future (80% have them now). There was also a fairly low response to questions about the need for more AVC openings (Table 7, p.57). Apparently, the respondents (superintendents or principals) are satisfied with the status quo.

Table 13 portrays some of the diverse characteristics of the participating high schools, and demonstrates to planners the wide variation in affluence and population concentration among various AVC districts. These factors must be incorporated into the district-by-district analysis that enters into a statewide plan for area vocational education.

-- Teachers believed that the AVC facilities were better than at participating high schools and at many community colleges, and that better equipment was the most important reason why their students had an advantage in the labor market. However, 24% said that AVC enrollments were too high and only 17% said they were too low, for the manpower needs of the region. Planners must take into account the needs for better equipment and perhaps for greater diversity of offerings.

* * *

The question before State planners is, how to provide the demonstrated successes of area vocational education to more people. The first chapter of this report, for the reader's convenience, presented the recommendations developed by this study. After the foregoing detailed discussions of the research conclusions, we re-iterate in closing that the recommended approach

TABLE 12.

RURAL, SUBURBAN, AND URBAN PARTICIPATING HIGH SCHOOLS' RESPONSES TO AVC ORGANIZATION QUESTIONS

Type of school	AVC fits high school 9th and 10th grades			AVC fits jobs			Lines of authority between AVC and participating H.S.			Sharing of capital costs			Sharing of operating costs		
	S	I	U	S	I	U	S	I	U	S	I	U	S	I	U
	128	47	7	137	50	6	164	33	5	137	27	8	133	31	10
	61%	22%	3%	64%	24%	3%	78%	16%	2%	67%	13%	4%	64%	15%	5%
Rural (163;77%)	78%	75%	57%	78%	76%	50%	81%	64%	60%	80%	82%	75%	79%	84%	70%
Suburban (30;14%)	16%	15%	14%	12%	18%	33%	12%	30%	0%	15%	15%	0%	15%	16%	10%
Urban (18;9%)	6%	11%	29%	10%	6%	17%	7%	6%	40%	5%	4%	25%	6%	0%	20%

(Total: N=211)

Source: Cross-tabulations of 216 Participating High Schools questionnaire responses.

TABLE 15.

PARTICIPATING HIGH SCHOOL CHARACTERISTICS

AVC number (code)	Number of high schools responding	Population density (persons per sq. mi.)			Self-categorization			Per student assessed valuation ($ thousand)		
		Less than 35	35 to 499	500 and over	Rural	Suburban	Urban	0-22	22-40	41 +
		(63; 36%)	(88; 51%)	(23; 13%)	(165; 78%)	(30; 14%)	(18; 9%)	(66; 34%)	(65; 34%)	(62; 32%)
1	3	33%	33%	33%	100%	--	--	100%	--	--
2	3	67%	33%	--	100%	--	--	20%	40%	40%
3	4	75%	25%	--	75%	25%	--	--	80%	20%
4	10	50%	50%	--	91%	9%	--	20%	20%	60%
5	14	14%	86%	--	73%	7%	20%	50%	29%	21%
6	6	67%	33%	--	100%	--	--	17%	33%	50%
7	5	20%	80%	--	86%	--	14%	43%	43%	14%
8	4	--	100%	--	20%	80%	--	20%	20%	60%
9	4	--	100%	--	83%	17%	--	40%	20%	40%
10	5	--	60%	40%	71%	14%	14%	20%	40%	40%

Source: Tabulation of 216 Participating High School questionnaire responses.

TABLE 13 (CONT.)

PARTICIPATING HIGH SCHOOL CHARACTERISTICS

AVC number (code)	Number of high schools responding	Population density (persons per sq. mi.)			Self-categorization			Per student assessed valuation ($ thousand)		
		Less than 35	35 to 499	500 and over	Rural	Suburban	Urban	0-22	22-40	41 +
		(63; 36%)	(88; 51%)	(23; 13%)	(165; 78%)	(30; 14%)	(18; 9%)	(66; 34%)	(65; 34%)	(62; 32%)
11	2	50%	50%	--	100%	--	--	--	--	100%
12	5	80%	20%	--	100%	--	--	100%	--	--
13	4	75%	--	25%	83%	--	17%	40%	60%	--
14	5	20%	80%	--	80%	20%	--	80%	--	20%
15	4	25%	75%	--	67%	--	33%	67%	17%	17%
16	5	--	20%	80%	--	100%	--	--	13%	88%
17	7	29%	71%	--	100%	--	--	14%	57%	29%
18	7	86%	14%	--	100%	--	--	13%	25%	63%
19	5	40%	60%	--	75%	25%	--	75%	25%	--
20	13	46%	46%	8%	93%	--	7%	8%	69%	23%

TABLE 13 (CONT.)

PARTICIPATING HIGH SCHOOL CHARACTERISTICS

AVC number (code)	Number of high schools responding	Population density (persons per sq. mi.)			Self-categorization			Per student assessed valuation ($ thousand)		
		Less than 35	35 to 499	500 and over	Rural	Suburban	Urban	0-22	22-40	41 +
		(63; 36%	(88; 51%)	(23; 13%)	(165; 78%)	(30; 14%)	(18; 9%)	(66; 34%)	(65; 34%)	(62; 32%)
21	14	43%	36%	21%	73%	20%	7%	20%	47%	33%
22	5	60%	20%	20%	100%	--	--	--	50%	50%
23	7	29%	43%	29%	55%	18%	27%	50%	50%	--
24	7	--	57%	43%	75%	13%	13%	71%	14%	14%
25	4	--	25%	75%	25%	50%	25%	--	25%	75%
26	2	50%	50%	--	100%	--	--	100%	--	--
27	4	25%	75%	--	100%	--	--	100%	--	--
28	4	75%	25%	--	100%	--	--	17%	17%	67%
29	2	--	50%	50%	50%	50%	--	--	100%	--
AVC not indicated	10	30%	60%	10%	77%	--	23%	36%	36%	36%

by State planners have built in requirements for flexibility. Not all endeavors by individual high schools to improve their own district's facilities should be supported with State funds--but some should be. Not all areas of the State should be served by present or planned AVC's--but some AVC's should be funded more strongly.

The State agency for vocational education must hold as its planning goals diversity of programming, equipment purchases, and teacher hiring; the financial solidity of joint agreements; formal and regional approaches to recruitment, guidance, and placement; and the excellence and accuracy of decision-making data. To achieve these goals, it must make flexible use of its funding policies, its ability to inform and persuade, and its influence on the priorities of the State as a whole.